

MOTOR AGE

Vol. IV. No. 10

SEPTEMBER 3, 1903

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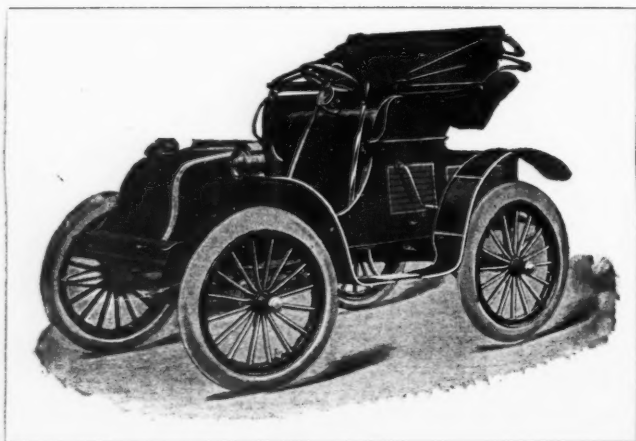
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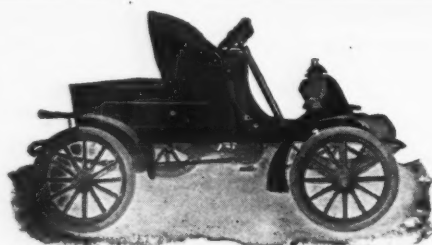
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MOTOR AGE

VOL. IV. NO. 10.

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\$2.00 Per Year

THE COLUMBUS 2-DAY MEET A SUCCESSION OF MATCH RACES

Columbus, O., Aug. 29.—Far out to the right of the animated grand stand; under the shade of stables that had upon occasion sheltered the wonderful Cresceus and other flying nags; surrounded by scores of hungry-eyed Ohio youths and by almost equally curious, if not so awe stricken, local amateurs; Barney Oldfield, erstwhile hero, leaned lazily against Bullet II, meditatively groping in his mind for the most appropriate bit of polite profanity. Out in front of the grand stand one Harry Cunningham, of Detroit, had just pulled a great, angry yellow speed maker

up close to the fence while a bunch of eager followers of the sport of automobile racing heralded him winner. Women in the grand stand—the matinee idol sort—smiled up into the faces of escorts with, "It must be lovely to beat Oldfield." It was, for a few minutes. Then Barney forced the swear words back from his lips, kicked a tire or two on the Gatling gun projectile and went over to where the Baby Bullet stood, unnamed except by the rather carelessly bestowed title of "Perey Owen's car," waiting a chance. Out onto the track Barney guided it and swept around the oval, as the little car merrily and evenly sputtered out a miniature imitation of a real Bullet's roar. Pretty, yes—as pretty a racing car as ever graced a track. Its chance had come—the first mile in a minute flat; the other four close to it—Cunningham never in the running with his canary colored giant—an easy win—5 miles in 5:04½—and the rail birds jumped up and down on the pickets



MOTOR AGE

Oldfield Taking Lead in Match with Cunningham at Columbus

go, Oldfield waited for the second day of the race meet of yesterday and today promoted by the Columbus Automobile Club, to show that his undoing was but temporary and accidental and that the Winton racers were fit for any class of competition.

Other interesting turns in the sport of professional automobile racing also characterized the Columbus meet. Carl Fisher, of Indianapolis, appeared with a great 100-horsepower, four-cylinder Mohawk racer to dispute the leadership of Oldfield and Cunningham with the Winton and Cooper racers respectively. His success in the venture was doubtful, for while he managed to beat Cunningham a couple of times, the car being new was a trifle ragged in its running. Its immense power, however, gave evidence that a little "tuning-up" may make of it a decided winner.

The meet was the second given this year by the Columbus club, and the success of the first, at which Oldfield on his red Ford-Cooper car placed the world's track record at 56½ seconds, encouraged the people of Columbus to turn out in good force. Friday, bright and cheery, brought 6,000 people to the driving park track, while Saturday, although hesitating on the edge of rain, provided 7,500 spectators. The track was in fair condition although not with a record breaking surface.

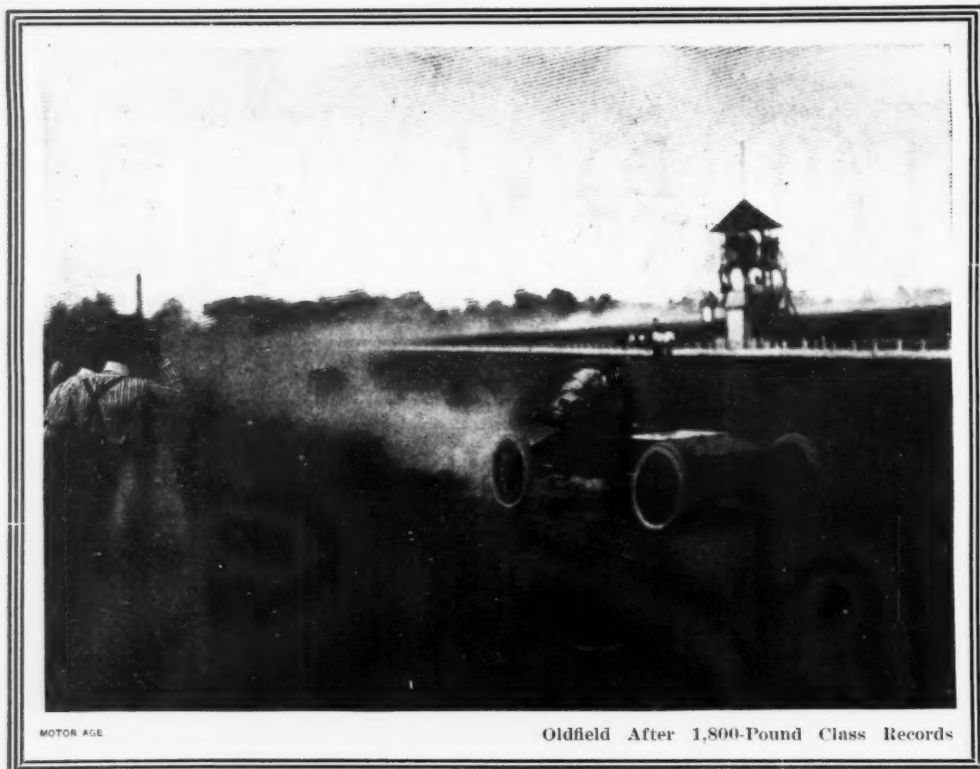
Much advertising and the always displayed feats of Oldfield had centered principal attention upon the performances of the big racing cars from Cleveland, Detroit and Indianapolis, and as at most of the western meets the races among local amateurs were by comparison much less interesting, because they were much less spectacular. However, there were several very good races among the Columbus club members, but, like all other such races at such meets, they showed clearly that to permanently sustain the interest of the public

these events must have large fields. The great speed spectacles enacted by the strictly racing cars make it impossible for the other events to attract attention by the same processes. There must be plenty of cars and keen competition—enough cars and close enough finishes to make the lookers-on forget speed and time. A runaway race is all right when the car that gallops to victory a lap or two ahead of the other car covers the track at a mile-a-minute gait—it is not interesting at half the speed.

The Columbus management set a good precedent in starting each afternoon's program at 1:30 o'clock, that it might be over well before dark. At this time Friday the grand stand was comfortably filled, and the long tier of white boxes at its front was resplendent with the colors of Columbus society's femininity. The crowd was by no means composed of "fans." Most of these, in fact, clung to the fence or swarmed around the racing cars in the stable enclosure.

The "Willie Dearborn" of the Ohio State Journal, marched from box to box collecting





Oldfield After 1,800-Pound Class Records

names, Clerk of the Course Frisbee called the competitors for the first event and the timers tried their watches for the twentieth time. It was an unique contest, this first event. Called a 2-mile club run each vehicle was to carry its full load of passengers, drive a mile, stop, unload, reload, proceed and repeat the stopping and unloading act at the end.

J. E. Cowan, driving Oscar Lear's Knox, won the race in 5.45%, his passenger being agile and his car susceptible to quick stopping. F. E. Avery, driving his own Winton, was second, E. W. Seeds, with a Sandusky runabout, third, and J. C. Sherwood, with an Orient Buckboard, fourth. Avery finished first, but his passengers were out of practice and the Cowan party took advantage of their tardiness in dismounting. W. H. Soules, with a Toledo touring car, was anxious to make a quick stop, over-ran the stopping distance limit and was disqualified.

Two Cadillacs only showed up to start in the second event, a 3-mile race for gasoline cars under 1,200 pounds. Joe Montgomery drove Dr. E. W. Schiller's car alongside that which Joe McDonald was piloting for Oscar Lehr, until the middle of the third lap, when something went wrong with the latter car, allowing Montgomery to run in by himself in 6:53%.

With unusually fierce cracking of sharp explosions, even for a racing car, the Mohawk built by the Indianapolis company of the same name, made its first appearance and racing debut, the latter in an attempt to break the world's track records from 1 to 3 miles. The car, long, low and with the driver's seat clear to the rear, looked the racer in every respect. Fisher drove fairly well for a man being new to such a game and tried to hug the pole all the way around. He was unable, however, to go faster than 1:07, 1:07 and 1:06½ for the successive 3 miles, and 3:20 for the total.

WHITE PROVES A STAR

Somewhat enthused by the speed, noise and general effectiveness of this trial against time, the spectators were good natured and expectant when the 5-mile race for fully equipped touring cars was announced. In this the White steam touring car became, among the local

cars, the star of the meet and its brilliance was undimmed throughout the 2 days. R. S. Rhoads drove the winning White in this event, covering the 5 miles in 9:07%. W. H. Soules, with a Toledo, was second; F. E. Avery, with a Winton, third; and Dr. C. M. Taylor, president of the local automobile club, with another White, was fourth.

BULLET II NOT IN GOOD FORM

A broken axle having prevented its use in competition at Louisville, Winton Bullet II, with Oldfield for driver, made its first formal appearance in track racing in the first heat of a best-two-in-three heat match race of 5 miles between Oldfield and Harry Cunningham. The latter drove Tom Cooper's yellow racer "999," and, getting away first, gradually put a long string of settling dust between himself and Oldfield, the latter struggling along with a poorly running car. The Bullet was not in

good shape and the best Oldfield could do was to allow himself to be caught from behind just as Cunningham finished his last mile.

CAUSE OF SLOW RUNNING

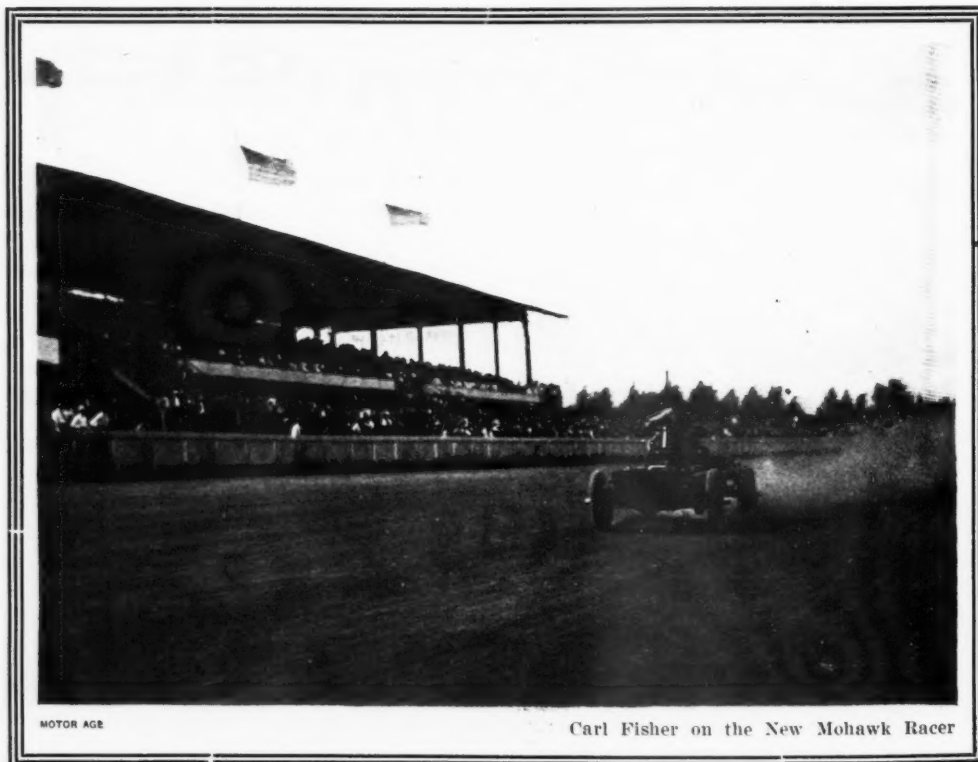
Great was the excitement and varying the comment. Knowing nothing except that Oldfield—the star, the favorite, the champion—had been defeated, the grand stand was divided against itself with opinions, reasons, excuses, explanations. As a matter of fact it was discovered after the race that the pneumatic governor peculiar to Winton cars for regulating the inlet, had in some manner become deranged and did not respond to the action of the hand control. The lubrication depending upon substantially the same source of pressure also failed. Cunningham's time by miles was 1:03%, 1:00%, 1:02%, 1:04, and 1:06, with a total for the 5 miles of 5:16%.

BABY BULLET A WINNER

There being no time to put the non-operating parts of the Bullet into working order, Oldfield drove the smaller car—that used by Percy Owen in the Gordon Bennett race—when he appeared for the second heat of his match with the Detroiter. This time he sailed away at winning speed right from the start, the little 1,600-pound car running beautifully and covering the first mile in 1 minute flat, the best time made during the meet. In this heat Cunningham never was close enough to be dangerous, Oldfield winning by a big lead in 5:04%. His time by miles was 1.00, 1:01, 1:00½, 1:01½, and 1:01½, being record for cars of the 1,800-pound class, the previous marks being those made by Julius Sincholle at the recent Empire City track meet with F. A. La Roche's Darracq. This left the race with a heat each, the deciding heat to be run the next day.

Six local motor bicyclists lined up for a 3-mile race. It was a pretty race and E. A. Neff, the winner, on a Thomas machine, made the distance in the good time of 4:39%. Frank Lowell on a Buckeye was second; Ernest Wolumber, on a Marsh, third; K. B. Seeds, on a Hercules, fourth, and H. A. Nichols, on a Mitchell, fifth.

All of the local White steamers contested a 5-mile race, which went to a car owned by



Carl Fisher on the New Mohawk Racer

Frank Davis and driven by J. H. Hicks; Dr. C. M. Taylor was second and R. S. Rhoads third. The time was 9:17%.

A race scheduled as a free-for-all, but which was really a three-cornered match, again brought out Oldfield and Cunningham, with the same cars used in the second heat of their race, and Carl Fisher with the big Mohawk. It was a great race, with Oldfield back about 30 feet at the flying start, much to his displeasure. Starter Anderson tried to recall the racers but they swept past his red flag into the fight.

Fisher led, with Cunningham tucked closely in behind and managed to keep in front during all of the first mile and well into the second. Then Barney hastened. In the back stretch he caught the others and went past them with a characteristic rush. He was about 350 yards ahead at the end of the third mile, a quarter ahead at the end or the fourth and finished with a lead of nearly a third. Fisher was second, 300 yards ahead of Cunningham. The time by miles was 1:05, 1:07, 1:05, 1:02% and 1:00%, with a total of 5:20 for the 5 miles.

A special 3-mile race between Oldfield and Cunningham closed the day's sport. It was easy for the former, who made the miles in 1:05, 1:01% and 1:04—3:10% for the three laps of the oval.

Following the practice of the previous day in commencing the program with a novelty, the management began Saturday's list with an obstacle race, which was better carried out in every way than any that has ever been attempted at a race meet in this country. A labyrinth course was laid out with tape and along it were strewn barrels, artificial "thank-you-marms," shovels and other bric-a-brac, while near the end hung a dummy which the drivers must try to pass twice without hitting, said dummy meanwhile being swung backward and forward in grotesque fashion rather bewildering to the motorist. The fact that none was able to miss Mr. Dummy coming and going showed that the contest was more difficult than funny—although it possessed plenty of the latter quality, especially when one driver knocked the dummy clear off his supporting strap and was rewarded with the shout "You've killed him!" Nine cars, mostly runabouts and electrics, competed. The scoring was by points and time also. J. W. Jeffrey, driving a National electric, was declared winner; R. O. Williams, driving F. E. Avery's Oldsmobile, was second, and W. D. Jeffrey, with a National electric, was third.

A stripped Cadillac, driven by Oscar Lear, captured the second contest, a 5-mile handicap, in which the winner drove an excellent race from scratch. The handicapping was done by distances instead of by times, as ordinarily, the six starters being placed at intervals around the track. An Orient Buckboard, driven by J. C. Sherwood, was limit, and held its lead for the first mile. Directly back of it was a Rambler driven by Herman Hoster; then a Sandusky driven by E. W. Seeds. The scratch man had caught two of the field, being fourth at the mile, with another Cadillac,

driven by Joe Montgomery, and a Ford driven by F. E. Avery, behind. At the end of the second mile the order was Seeds, Hoster, Lear, Sherwood, Avery and Montgomery. The scratch man continued his overhauling process and passed to the lead by the time the third mile was completed. Following him in order

the 5 miles. His total time was 5:14% and the time by miles, 1:03%, 1:02%, 1:03, 1:02% and 1:02%.

Three White steamers, a Toledo and a Peerless appeared for the 5-mile handicap. F. A. Davis' stripped White, driven by E. M. Leid, was scratch. The other Whites were driven by Dr. C. M. Taylor and R. S. Rhoads, respectively, and H. W. Soules piloted the Toledo. This got a bad start and was almost caught by the scratch man before it got under way. It was successful, however, in making up much of the lost distance on the others of equal handicap.

At the end of the first mile Leid had caught all but Rhoads. Behind, Taylor, Soules and the Peerless came in order. At the end of the second mile the scratch car had taken the first position, closely followed by Rhoads, with Soules and Taylor tire to tire for third position. The Peerless was lapped and in the next round dropped out, as did also Taylor's White, leaving the race to Leid, Rhoads and Soules. They continued in this order to the finish according to the scoring of the MOTOR AGE representative, but the announcer gave Soules second position and Rhoads third. The time was 7:26%.

Carl Fisher essayed to break the world's track records from 1 to 3 miles with his Mohawk,

but was again unsuccessful. On the first attempt something went wrong with the transmission, near the end of the first lap, and he withdrew to readjust it. On the second attempt he withdrew at the end of 2 miles.

The 5-mile handicap for motor bicycles brought out the six of yesterday's race and two others. This field of eight was placed well around the track, with E. A. Neff on scratch with his Thomas. Again he rushed to the front and won easily in 7:55%. Frank Lowell, on a Buckeye, was second, E. S. Adams, on a Mitchell, third, and H. A. Nichols, on a Mitchell, fourth.

Oldfield was out of the running early in what was scheduled to be the star event of the day—another three-cornered race between himself, Fisher and Cunningham. Oldfield was last at the flying start, but took the pole and went quickly after the others. Near the end of the first lap, however, the rear axle gave way, twisting so badly that it was impossible to run the car further. This left the race a match between Cunningham and Fisher, with the former in the lead. They rode close together and the picture was superb as they swept up the dust on the turns. Fisher managed to get ahead in the third mile and finally opened a space of 300 yards between himself and Cunningham. Fisher's time was 5:35%.

The prettiest race of the day, and probably of the meet, was the final event—a 2-mile match between Cunningham and Fisher. They were even at the end of the first lap, and then Cunningham drew ahead somewhat on the back stretch, but was overtaken, and in the home stretch was passed by Fisher, who got in first by about 100 feet. His time for the miles was 1:07 and 1:08%, respectively, with a total of 2:15%.



MOTOR AGE

Oldfield Gives His Wife a Fast Ride

were Seeds, Hoster, Avery and Montgomery, Sherwood having quit. There was no change of position in the fourth mile, but in the fifth Avery caught Hoster and went after Seeds. This chase was the pretty part of the race, and, much to the surprise of the crowd, the Ford finally caught up with the Sandusky in time to pass it by a few yards just at the tape, getting second place thereby. Hoster was fourth. Lear's margin at the finish was wide over all the cars and a full lap over some.

Still using the smaller Winton racing car, Oldfield appeared for a try at the records for 1,800-pound cars, going 10 miles. The little car ran smoothly and with remarkable evenness, many of the miles being reeled off with but a shade of difference in time. All the times were better than those made by Sincholle at the Empire meet, but those for the first 5 miles were over those of the second heat of Oldfield's match with Cunningham the day before. The 10 miles were made in the following successive times: 1:01%, 2:04%, 3:06%, 4:09, 5:11, 6:14%, 7:17, 8:19%, 9:23 and 10:35%. The times made in the previous 5-mile run were 1:00, 2:01, 3:01%, 4:02% and 5:04%.

The remarkably even running of the little Winton hinted that Cunningham could not repeat his defeat of Oldfield in the third and deciding heat of the match and the prediction was correct. With an even start Oldfield went ahead and leased the pole for a lap. Then, with a safe margin, he resorted to his usual tactics of swinging diagonally across the stretch and rounding down close to the pole again on the turn. He was ahead 400 yards at the end of the first mile, 3-16 of a mile at the end of the second, and gradually increased this to almost a half by the time he finished

FINDS PLEASURE IN NORTHERN TOURING

Illinois Automobilist Greatly Enjoys "Arctic Circle" Trip Through Sweden and Norway—Sweden Seemingly Prosperous but Without Good Roads—Residents Along Route Courteous and Friendly—Good Appetite in Scandinavia

Charles Glidden, of Boston, who has been engaged in automobile touring through Sweden and who but a short time ago crossed the Arctic circle, must divide honors of pioneer Arctic touring with Henry Thobro, secretary of the Bloomington Automobile Club, of Bloomington, Ill., who is now engaged in the same kind of a trip, although he has chosen the west side of Norway instead of the east side of Sweden as his route. Mr. Thobro is doubly venturesome in driving an automobile into such unaccustomed country, for, while vigorous in spirit, he is not an able-bodied man, having but little use of his lower limbs.

CLOSE TO THE ARCTIC CIRCLE

Below are extracts from letters written by Mr. Thobro to President S. P. Irwin, of the Bloomington club.

Namsos, Norway, Aug. 2—On the map of Norway, Fjorden Fjord, 1½ degrees south of the Arctic circle, is easily located. At the head of this bay is the river Namsen, which incidentally, is the best salmon river in Europe. Here is located the little town of Namsos and about 14 miles north, on one of the arms of Fjorden, is a small farm called Ytterby—our present stopping place.

Crossing to Europe our car was somewhat damaged, and although the vital parts of the machinery were uninjured, 3 days were required in Copenhagen before we, W. E. Warner, of New York, and myself, were able to get the car in shape to leave. On July 10 we took the steamer from Copenhagen for Helsingborg, Sweden, on the other side of the sound. Then the land trip through Sweden and northward through Norway began, lasting until July 22, the day of our arrival at Namsos.

One may wonder why I have not written a detailed account of my trip, but imagine caring for and running a car over all kinds of roads and in all kinds of weather, making on an average from 75 to 100 miles a day and then it will be easy to agree with me that mental and physical rest is too sweet to make agreeable any further efforts. And how one can eat and sleep during such a trip! Never, even in my childhood days, have I more enjoyed my food and sleep than since I started on this journey. Better still is it to waken in the morning, after an unbroken unconsciousness of from 8 to 10 hours, to find both mind and body entirely recuperated and in perfect condition for the day's work. It is worth going a long way to accomplish such results.

"The place where we are stopping is one of those small farms found in Norway, wherever it is possible for man to wrest a few acres from a "step-motherly" nature. It is owned

by a man who has been to America to earn enough to pay off accumulated debts and improve his little holdings. Everything about the place is plain but clean and attractive. There are home-made carpets on the floors and lace curtains at the windows. A bouquet of white roses, lilies and other cultivated flowers, picked from the little garden beneath the window, stands on the table, and the windows are filled with plants in pots. Pictures, several from America, adorn the walls.

Stepping outside one could easily imagine himself in one of the most picturesque localities on the coast of Maine, not only from the formation of the rocks, but also from the vegetation. In whatever direction one looks are grand landscapes—excellent studies for the artist—made up of bays, sounds and islands of all shapes and sizes. Spruce and firs, alder and birch, vie with each other in their efforts to cover the granite rocks, and wherever there is the least crevice they will find lodgment. The grasses grow most luxuriantly and wild flowers abound. The summers are short and the days, even in midsummer, are often so cool as to make winter clothing comfortable. Yesterday the first new potatoes were placed upon our table. Strawberries were also served and what they lack in size they make up in flavor.

SWEDEN'S ROADS POOR

But to return to Helsingborg, where our journey north really begun. It took some time to clear the custom house, where full duty was paid on the machine with the privilege of remittance upon leaving the country. Although an industrial exposition in progress tempted us to tarry, we concluded to test

the Swedish roads at once, so we started northward.

The road, at first, follows the coast line and proved, like all roads in northern Sweden, to be a disappointment. I had made careful inquiries as to the roads in Norway and had received, in most cases, favorable replies, which I found to be correct. But as to Sweden, it being on the whole a flat country—I took it for granted that the roads would be good. The central government, however, seems to have entirely neglected the public roads in this part of Sweden, and they are kept up by the farmers in about the same slovenly manner that we know so well in our own dear Illinois. The family goat must have been the engineer of these Swedish roads, as in no case has the opportunity to run the road over a krag been neglected, even though it might as well have been laid around the krag on the level.

THROUGH PROSPEROUS COUNTRY

Even at that we made fair progress and arrived at Hoganas Inn, between 10 and 11 o'clock at night, just as it was getting dark. Here we were received by a young woman, and upon Mr. Warner's desperate efforts to speak something not English, she replied in excellent "United States." Both the proprietor and our hostess had spent several years in America, so we were received more as old friends than strangers.

After having rearranged our goods and chattels on the machine we set out at about 11 o'clock the next forenoon for a good day's run, but a blunder in choosing the wrong road lost us more than an hour right at the start. As on the previous day, the road passed through a most pleasant country to look upon. Nowhere have I seen more luxuriant vegetation in the way of grasses and small grain. Everything bore witness to the presence of a prosperous, intelligent and progressive population. The haying season was on and mowing machines were at work. I stopped to look at one which proved to be of a well-known American make. On my in-

quiring if Swedish machines were not used I was told that they were, but that the American makes were better on account of their greater strength and less weight, that the American woods as well as steel were superior to the Swedish materials. I thought my informant was in error as to steel, but he maintained that Americans had a method of hardening and tempering steel which made it superior to that made in Sweden. This was new to me and shows how the American "captains of industry" are carrying the last ditches in the struggle for commercial supremacy.

Arriving at Laholm we inquired for a place where we could secure "benzine," which seems to be the name mostly used for gasoline. We were referred to a druggist, where we took about the whole stock of "naphtha" at about a dollar a gallon. And it proved "hot stuff." Never was that little engine more like a thing alive than that afternoon. It simply ran riot. As no harm



MOTOR AGE

Harry Cunningham on the Cooper Racer

resulted I am a convert to the use of high test explosives.

All the men and boys we met took off their caps and hats with a long forward sweep of the arm which we quickly learned to imitate. The girls made a sudden dip downward by bending their knees as we passed—their method of courtesying. And right here in Sweden can be seen the bluest eyes, the fairest skins and the most magnificent heads of yellow hair that can be met anywhere.

Sympathy and kindness are strong features of the Swedish character and the Swede is the gentleman of the Germanic race. The peasants invariably addressed me, the secretary of the Bloomington Automobile Club, as "Herr Baron." They elevated me to a place among their nobles without consent of king or parliament, for how could the owner of an automobile possibly be of a lower rank than baron?

POLICE "RATTLED"

At Halmstad, where we made a short stop, the whole population turned out to see the first "devil" wagon" which had ever passed that way. A policeman appeared, but evidently was at a loss how to cope with such a situation, as he departed in haste, reappearing reinforced by the entire police force, which consisted of another patrolman and the chief. They all seemed greatly flustered at this foreign invasion of their quiet village and the chief demanded that I get into a private yard or move out of town, as the street was blocked with people. I answered that I had not sent for the people; they were his own and he had better take care of them himself; that I demanded, as my right, courteous treatment from him while making the short stop. To this he made no reply, but set to work dispersing the crowd. This was the nearest approach to discourteous treatment in Sweden, and even at that I have no cause to find fault.

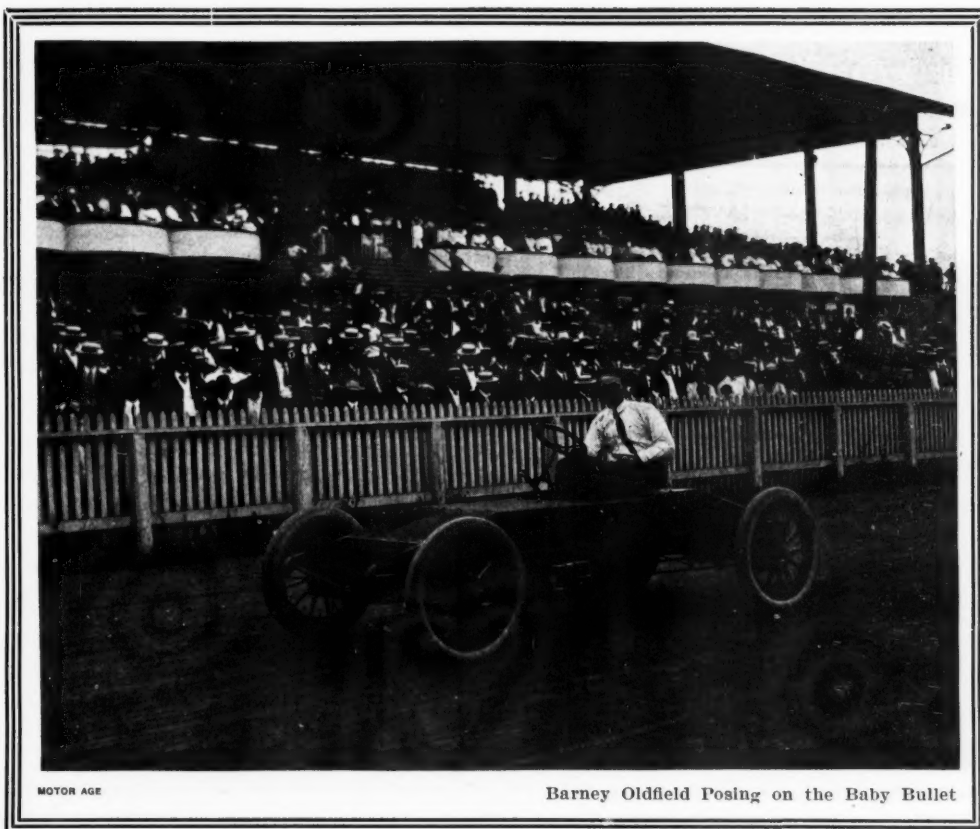
A SUNDAY CENTURY

Falkenberg, an interesting little city of the middle ages, was reached late in the afternoon after an advance of over 100 miles during the day, and here we put up for the night. Our greatest difficulty in getting the right road was in leaving a town, therefore we were grateful when a cyclist volunteered to pilot us for several miles out of Falkenberg the following day—Sunday. The weather was perfect and we passed through a fertile country with many windmills and large, stone churches. Low ridges of bare rock separated the broad valleys, but the road found passes which were reached with but slight grades. Church-goers were many and we made frequent stops on account of frightened horses, but with care no accidents occurred. Gothenburg was reached in the early afternoon and another hundred miles had been placed to the credit of the little 1902 Oldsmobile.

I will continue the story of the trip—probably on the next rainy day.—H. THOBRO.

TRYING TO ARRANGE MEET

Chicago, Sept. 2—The Chicago Automobile Club centennial racing committee, A. C. Banker, Jack Fry and K. Franklin Peterson, is endeavoring to arrange a date for a race meet during the centennial. The date most favored is September 26, but a telegram from Barney Oldfield received Tuesday by Fry says that he cannot be here on that day. G. D. Stuart, of the Cooper combination, wired that the



Barney Oldfield Posing on the Baby Bullet

racers would be in the west the latter part of September and could be here on the twenty-sixth unless a date was made with Philadelphia for that day. The negotiations with Philadelphia have not yet been definitely concluded. Tuesday and Wednesday, September 29 and 30, have been suggested as good days, and it may be that these will be chosen. The automobile club committee will meet with the centennial committee some day this week and will endeavor to make definite arrangements.

PARISIANS SURE OF SPECIAL TRACK

Grounds Leased and Plans Laid for Construction of Oval Speedway With Straight Course for Kilometer Trials

The much desired autodrome near Paris has almost become a matter of fact. After months of searching for a proper spot, a splendid location has been found in the little village of Brou, only 30 minutes distant from the Paris boulevards. The grounds were bought and a plan or sketch of the track has been drawn. The circumference of the motordrome will be about 4½ miles, while a straight course of about 1½ miles will be made for kilometer trials. While the first thought was to reserve the grounds for automobile performances only, it has since been decided that as there is plenty of spare room it could be made a general sporting park, where football, tennis, cricket and foot contests may be given. It is also intended to build a number of summer cottages, a large repair store and a grand stand. The castle of Brou, which is located on the grounds, may some day become a second home for the Automobile Club of France, as many have expressed the opinion that it would serve excellently for a suburban club house.

M. Mors, when asked about the projected track, declared that it was a good idea, but that great precautions would have to be taken when driving on the turns, as these could not be very high. "They should, as much as possible, resemble those encountered on the ordinary roads. I believe that the track ought not to be exactly oval, but that at both e-

there should be a series of short, straight lines with convenient banks so that there would be no danger in taking them at good speed."

Gabriel was of about the opinion as Mors regarding the turns. "The track itself seems to be just what is required, especially the splendid straight course for the kilometer events." Rene de Knyff was quite enthusiastic about the straight course when told the project, but said he preferred a track as large in circumference as the Forest of Fontainebleau, which means about 18 miles. "But," he added, "better small than nothing." M. Loeser, of the Michelin tire company, said the track would be too small for powerful cars, but quite suitable for the light cars and motor cycles. The kilometer is now made in 26 seconds and thus the track would be covered in 3 to 4 minutes. This seems somewhat dangerous for such a short course, but better this than no course."

RAIN WAYLAYS OLDS TOURISTS

The heavy rains in the West last week effectually prevented any traveling by the Oldsmobile transcontinental tourists, so the entire week was spent in Omaha, holding an umbrella over the automobile. From 7 to 10 inches of rain fell, making travel almost impossible in anything except a boat.

The tourists had intended to leave Omaha on Monday of last week, but on that day a heavy rain fell, and bridges on team and railroad tracks were washed away. Several lives were lost and much stock was drowned. Small streams overflowed their banks until they were miles wide, and people rode around the streets in boats. After the flood has subsided, there was nothing but a vast expanse of mud, so that automobiling was impracticable.

Whitman writes MOTOR AGE under date of August 30, saying they will leave Omaha as soon as the roads are in condition for traveling, but he thinks they will have a hard proposition between Omaha and Chicago, because of the washouts and mud.

MOTOR AGE

Published Every Thursday by THE TRADE PRESS CO.
AT 1303 MICHIGAN AVENUE, CHICAGO.
Telephone Calumet 7011

Eastern Office, 150 Nassau Street, New York.
London Office, American Publication Bureau,
58 Manor Park Road, Harlesden, N. W.



Entered at the Chicago Post Office as Second Class Mail Matter.

Subscription Two Dollars per Year

Any news dealer may obtain MOTOR AGE through the Western News Co., Chicago, or any of its branches, on a returnable basis

ON BICYCLE CONSTRUCTION

There are tendencies in motor car construction which show that the universal dropping of bicycle systems of construction after their first adaptation to automobile building, might have been precipitate.

There were some points in bicycle construction which have hung on and are today almost standard in motor car construction.

There are other points which have been discarded in favor of entirely different methods. For instance, as soon as the reachless type of running gear became popular, away went tubular frame construction.

This was not entirely without reason nor was it entirely reasonable.

The real desire was not to avoid tubular construction. It was to avoid reach construction.

The tendency was toward rectangular frames hung upon semi-elliptical or, in some instances, upon full elliptical springs. Because reach frames had almost invariably been tubular frames the act of discarding became generally of both—reaches and tubes; while the real necessity was only for one—reaches.

Then came the angle iron construction—agricultural implement practice with bolts and rivets. With it came other lines of construction in which, in many instances, the necessary rigidity of construction has been secured by main strength and awkwardness of the parts rather than by any system of design attempting to obtain the requisite strength by the most economical use and the most suitable distribution of the metal.

Bicycle construction was at first of this kind. Bulk instead of design gave strength.

A reaction in the automobile trade is imminent. The pressed steel frame marks it.

This is not exactly bicycle construction—nor is it agricultural implement construction. It possesses qualities of each—the effort of one to better distribute metal, and the characteristic of the other permitting the ready attachment of parts without the use of brazed lugs.

Some of the European makers have stuck to tubular construction, though perhaps at greater manufacturing expense, and the great 100-horsepower Gobron-Brillie racer is the best evidence on earth of the ability to produce the maximum of power and speed with the minimum of dead weight.

Its frame instead of holding up from end to end by simply being heavy and consequently strong, is made as a truss on each side, and strength is thereby gained that in no other

way could be secured by the same amount of metal.

The pressed steel frame suggests taper square tubing, drawn specially for motor car frame side bars, with the diameter greatest in the middle and tapering toward the ends so that the latter may be curved to form "pump handle" spring brackets.

This would be resorting to bicycle construction in a way, but it would afford a frame possessing all of the advantages of the tubular frame, together with the quality of allowing the bolting or riveting to it of parts and other frame members in cases in which brazing would not be desirable.

It is, at any rate, safe to say that the methods whereby bicycle construction was adapted to automobile construction in the beginning of the motor car industry does not mark the end of such construction.

ON BEING BEATEN

At nearly every race meeting one man, if not a half-dozen, wanders into the press stand with his pocket full of cigars or his mouth full of talk—it matters little which—and explains to the fellows behind the pencils that he dropped out, or was licked to a finish, or had such a close shave, because the commutator fell out with the vibrator coil or the rotary pump had a fight with the radiator or some element of the car's mechanism had a fit all by itself.

He is one of the great "if" brigade, mustered into service by his own words. "If" something had not gone wrong he would not have been left around where the dust settles slowly after the departed winner. He "wants to be taken care of in your story, old man."

If a sprinter fails to run his hundred yards as fast as the next long haired college boy because his feet are too heavy, he is beaten.

If a bicycle rider's legs give out, he is beaten. If a yacht loses the cup because its jib boom cracks into six pieces it is beaten; if a running horse is left at the post because of a spavin it is beaten.

If an automobile goes wrong in a race why should it also not be beaten?

Of course in the official score it always is

A REMINDER THAT

FOUR YEARS AGO LAST WEEK

F. O. Stanley with a Stanley steam car made the first ascent of Mount Washington, New Hampshire, consuming 2 hours and 10 minutes in the 10-mile climb.

THREE YEARS AGO LAST WEEK

The officials made public the awards for automobiles at the Paris Exposition, the announcement showing that the Electric Vehicle Co., the Locomobile Co. of America, the Riker Electric Vehicle Co. and the American Electric Vehicle Co. were the American builders to get medals.

TWO YEARS AGO LAST WEEK

Vanderbilt proved the hero of the Newport, R. I., track meet, defeating Foxhall Keene in the final of the principal event, a 5-mile open.

ONE YEAR AGO LAST WEEK

E. B. Martin of Chicago finished a run from that city to New York in a Packard, the actual running time of which was 72 hours.

beaten when in such a fix, but where lies the reason for this perpetual line of excuses, as though the car were found "not guilty" by their utterance.

It is just as much a part of the success of an automobile to always run smoothly and evenly from start to finish of a race as that it run like the very lightning when it runs at all.

It is not so much a trick to build a car which can run under record time for a fraction of the allotted distance of its race as it is to build one which will run the whole distance every time it appears for racing.

It is all right to tell why a car failed. But it is not reasonable to excuse the car because the reason is given.

Being beaten by "going wrong" when going fast is just as much of a failure as being beaten by going slowly without "going wrong."

There is little excuse for the operator who "goes wrong" when driving a car. He is simply a poor driver. Why should it be different with the car?

ON EDISON'S BATTERY

A short time ago MOTOR AGE reprinted and commented editorially upon a newspaper story relative to the Edison storage battery. This caused the usual burst of comment that results from "interviews" relative to Edison's battery.

One feature of the fake interview that was spread broadcast was a statement concerning a trip from Orange, N. J., to Atlantic City in a car supposed to be propelled by the famous Edison storage battery.

Direct inquiry by MOTOR AGE brought the statement from Mr. Edison that this trip was made in a Pan-American gasoline touring car. Edison further says that the interview was not authentic.

It is, of course, honest in Mr. Edison to repudiate the interview when questioned concerning it. An immediate and voluntary denial would have been still better.

Anent the actual practical value of the Edison battery information given out by President F. A. Babcock, of the Buffalo Electric Carriage Co., Buffalo, N. Y., as a result of correspondence between himself and the Edison Storage Battery Co., is both interesting and valuable. Mr. Babcock says: "I asked the Edison company to send me a description and the price of this new Edison battery. I received a letter, enclosing a blue print showing the battery. The letter is signed by W. S. Mallory, vice president of the Edison company.

"Mr. Mallory says: 'The capacity of our D type cell is about 150 amperes on long charge. The average voltage is 1.25; the weight per cell, including tray, about 18½ pounds. Our present price is \$15 per cell.'

"A velocity of 80 volts, at \$1.25 per cell, means sixty-four cells. A weight of 18½ pounds per cell means a total weight of 1,184 pounds to the battery. The price per cell being \$15, the cost will be \$960 for the battery.

"The commercial battery in use today with a velocity of 80 volts has forty cells, instead of sixty-four; weighs 800 pounds, instead of 1,184; costs \$350, instead of \$960.

"Thus taking the new Edison battery as described by Vice-President Mallory it has to have twenty-four more cells, weighs 384 more pounds and costs 610 more dollars than

the battery now in use and the power of the two batteries is the same—80 volts.”

Writing further upon the subject to *MOTOR AGE*, Mr. Babcock says:

“The public have been led to believe that the Edison battery was to be a very light one, while the weight as given—18½ pounds per cell—shows at a glance that it is equally as heavy as any of like capacity on the market.

“The price itself, places it way out of commercial use, for I do not believe any one would willingly pay \$960 for a battery to put into a stanhope or runabout, and one must put in the number of cells stated in order to get the voltage.

“Furthermore, the cells are 15 inches in height, and it would require a body of the length and depth of an express wagon to contain the battery.

“As far as I am able to learn, the battery works well in the laboratory, but does not show any advantages when put into commercial use.

“We are using a battery that weighs only 800 pounds, and within the past few weeks, with one of our regular stanhopes have made 73¼ miles on one charge at a rate of 15 miles per hour, around the suburbs of Boston, which vicinity, as every one knows, is quite hilly.

“As far as we can learn, the greatest mileage that has yet been made by the Edison battery is 82 miles at the very moderate rate of speed of 8 miles per hour.”

Evidently the Edison battery is hardly the wonder that it has been credited for be-

ing. Nor is it probable that it will “revolutionize the automobile trade.”

Some of the Eastern motorists are getting the “number fever,” and are applying for licenses and numbers in various states. These numbers are all placed on the car, giving it the appearance of having traveled far and long. The innocent bystander is impressed with the fact that he is gazing on a tourist who has been doing some extensive traveling, when perhaps he has never been outside his native state. The fad is on the same principle of that of the man who buys a suit case and a job lot of hotel labels of foreign countries, and then exhibits it to his admiring friends.

A motor speed guessing contest was held recently by the police of Oxford, England. The policemen were stationed at intervals of 20 yards along a track, without any watch to guide them, and they then estimated the speed of a motor bicycle. The winner of the contest under-estimated the actual speed by 1 mile per hour, as he guessed 23 miles instead of 24, the time given by the timekeepers. Such a contest in various cities in the United States might lead to some startling discoveries as to the ability of the police as speed guessers.

A French count has offered his service for several hours daily as interpreter at a garage in exchange for the use of a car. Bogus French counts are probably now working overtime reading bills of fare so they can acquire dexterity in handling the French language and then seek positions as chauffeurs.

According to *Motoring Illustrated*, of London, Louis Mooers must be “a deuce of a fellow,” as that journal says he has been arrested nearly forty times in Cleveland for speeding, and after paying thirty-seven fines an order was issued that he was not to be further molested. From this it is to be presumed that motorists are immune from arrest after they have passed the three dozen limit.

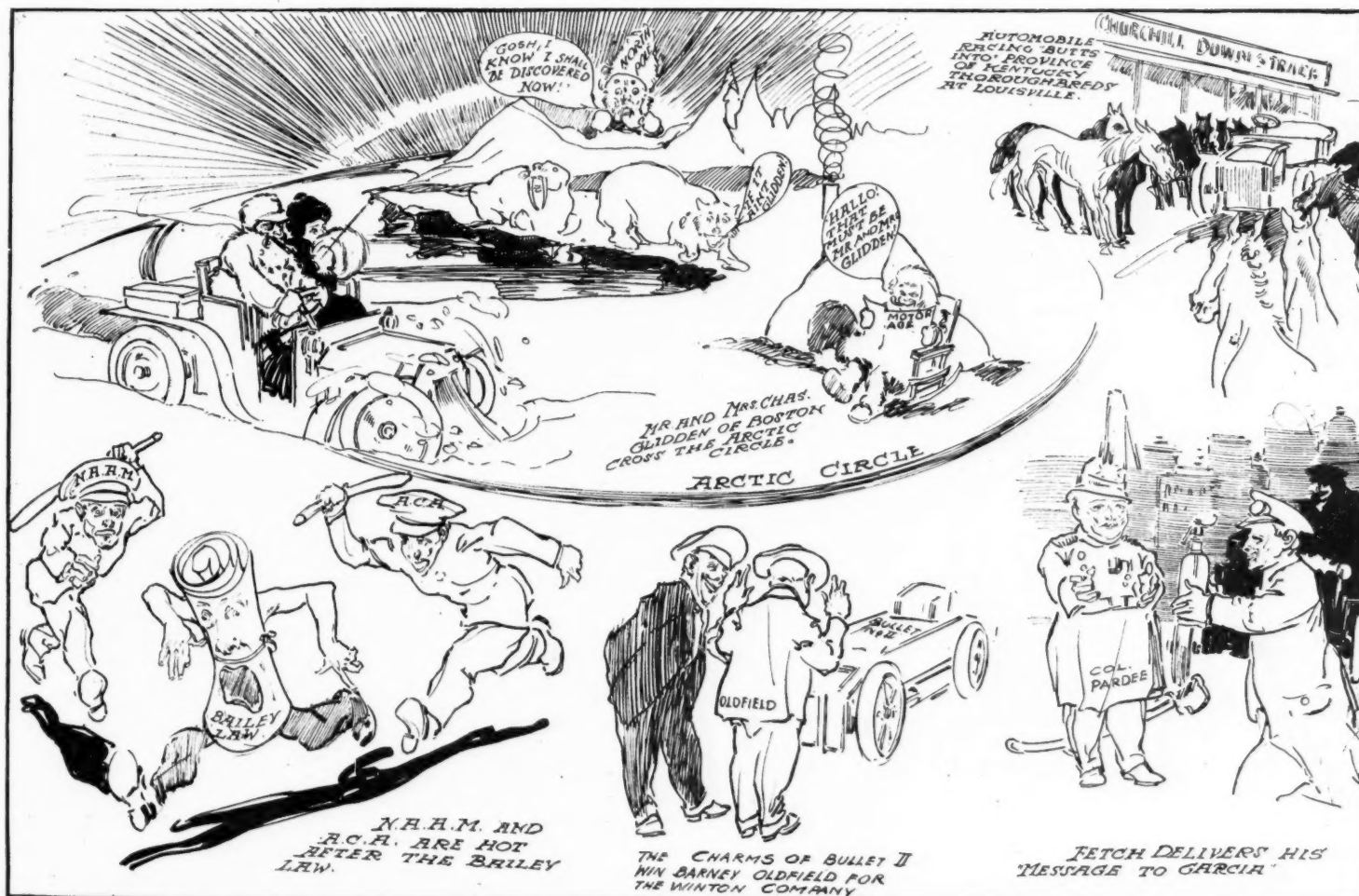
The motorists of England are now obeying the scriptural injunction of demanding an eye for an eye and a tooth for a tooth and are taking proceedings against persons who leave a horse and wagon standing unattended on the road. When a team of three horses is in charge of one person the owner is violating the law, which demands two.

English motorists early this season began the practice of scattering confetti to warn brother motorists of police traps. The upholders of the law discovered the artifice and went them one better by liberally scattering the confetti—and then moving the trap farther up the road.

Many Englishmen are encouraging their wives to do the driving of their motor cars, believing that the chivalrous police will overlook many trifling infractions of the law which would otherwise result in arrest if the husband were at the wheel.

Gen. Miles says that motor bicycles will take the place of horses in the next war, and the money wasted on a mounted force should be spent on a road building corps.

FEATURES OF AMERICAN AUTOMOBILING IN AUGUST



MANY FAST ONES ARE PROMISED

Entries for the Cleveland Races Include Proven and Unproven Special Speed Cars—The Two-Day Program

The large number of entries for the automobile races at the Glenville track, Cleveland, O., next Friday and Saturday promises to make the second annual meet an unusually good one. If the weather is fair the attendance promises to be enormous, as many stellar attractions are offered.

FRIDAY'S ENTRIES

The entries received up to Tuesday evening are as follows:

First event, 2-mile race for cars of 1,000 pounds and under—Olds Motor Works, 10-horsepower Oldsmobile driven by D. Wurgis, 4-horsepower runabout driven by W. Wigle, 4-horsepower runabout driven by F. Prong; Charles Meyer, 12-horsepower Rainey special; Otto Konigslow, Konigslow racer.

Second event, 5-mile handicap for club members only, each car to carry four persons and have regular road equipment—Pope Motor Car Co., 10-horsepower Toledo; Otto Konigslow, Konigslow racer; F. B. Stearns Co., 24-horsepower Stearns.

Third event, 5-mile race for cars of 1,800 pounds and under, all powers—Winton Motor Carriage Co., four-cylinder Gordon Bennett racer, Harry L. Owsley, driver; Olds Motor Works, 10-horsepower Oldsmobile, 4-horsepower runabout driven by W. Wigle, 4-horsepower runabout driven by F. Prong; J. Sincholle, 40-horsepower Darraq; Charles T. Collings, 35-horsepower Peerless; F. B. Stearns Co., Stearns racer; J. L. Hedges, White racer; Otto Konigslow, Konigslow racer.

Fourth event, 10-mile open—Winton Motor Carriage Co., four-cylinder Gordon Bennett racer, eight-cylinder Gordon Bennett racer driven by Barney Oldfield, Bullet No. 1 driven by Charles Hamilton; Olds Motor Works, 10-horsepower Oldsmobile and two 4-horsepower runabouts; J. Sincholle, 40-horsepower Darraq; L. P. Mooers, 80-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., White racer driven by J. L. Hedges.

Fifth event, 5-mile race for manufacturers' challenge cup—Winton Motor Co., four-cylinder Gordon Bennett racer, eight-cylinder Gordon Bennett racer and Bullet No. 1; Olds Motor Works, 10-horsepower Oldsmobile and two 4-horsepower runabouts; J. Sincholle, Darraq; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers.

Sixth event, 10-mile handicap, 3-minute limit—Winton Motor Carriage Co., four-cylinder Gordon Bennett racer, eight-cylinder Gordon Bennett racer and Bullet No. 1; Olds Motor Works, 10-horsepower Oldsmobile and two 4-horsepower runabouts; J. Sincholle, Darraq; Paul Rainey, Rainey special; Charles T. Collings, 35-horsepower Peerless; L. P. Mooers, 80-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers; Otto Konigslow, Konigslow racer.

Seventh event, 1-mile electric race—F. J. Baird, own make; Pope Motor Car Co., Waverley.

Record trials will be held at the close of these events.

On Saturday the card will be finished as follows:

Eighth event, 1-mile race in heats, best two in three, open, flying start—Winton Motor Carriage Co., four-cylinder and eight-cylinder Gordon Bennett racers and Bullet No. 1; Olds Motor Works, 10-horsepower Oldsmobile and two 4-horsepower runabouts; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers.

Ninth event, 2-mile race for cars of 800 pounds and under—B. J. Ruetenik, Orient; White Sewing Machine Co., White; Olds Motor Works, two 4-horsepower Oldsmobiles.

Tenth event, 5-mile open—Winton Motor Carriage Co., four-cylinder and eight-cylinder Gordon Bennett racers and Bullet No. 1; Olds Motor Works, 10-horsepower Oldsmobile and two 4-horsepower runabouts; J. Sincholle, Darraq; L. P. Mooers, 80-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers.

Eleventh event, 10-mile handicap for cars of 1,800 pounds and under, 3-minute limit—Pope Motor Car Co., 10-horsepower Toledo; Winton Motor Carriage Co., four-cylinder Gordon Bennett racer; Olds Motor Works, 10-horsepower and two 4-horsepower Oldsmobiles; J. Sincholle, Darraq; Paul Rainey, Rainey special; Charles T. Collings, 35-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers; Otto Konigslow, Konigslow racer.

Twelfth event, 5-mile electric race—F. J. Baird, own make; Pope Motor Car Co., Waverley.

Thirteenth event, 10-mile handicap, 3-minute limit—Winton Motor Carriage Co., four-cylinder and eight-cylinder Gordon Bennett racers and Bullet No. 1; Olds Motor Works, 10-horsepower and two 4-horsepower Oldsmobiles; J. Sincholle, Darraq; Paul Rainey, Rainey special; Charles T. Collings, 35-horsepower Peerless; L. P. Mooers, 80-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers; Otto Konigslow, Konigslow racer.

Fourteenth event, 10-mile Australian pursuit race—Winton Motor Carriage Co., four-cylinder and eight-cylinder Gordon Bennett racers and Bullet No. 1; Olds Motor Works, 10-horsepower and two 4-horsepower Oldsmobiles; J. Sincholle, Darraq; L. P. Mooers, 80-horsepower Peerless; F. B. Stearns Co., Stearns racer; White Sewing Machine Co., two White racers.

GREAT PROSPECTS FOR NARRAGANSETT

The Rhode Island Automobile Club expects to outdo all previous efforts during its third annual race meet at Narragansett park, Providence, on September 19. The club has been in communication with automobilists all over the country, and an excellent card will be presented. Barney Oldfield will be one of the attractions, and arrangements are being made for special match races and speed trials between some of the fastest machines in America. Julius Sincholle is included in the list and George Cannon, who is having his steamer rebuilt, will drive it the first time at this meet. Henri Page, with his 40-horsepower Decauville, and Harry Fosdick, with the car driven by Percy Owen in the Gordon Bennett race, will be among the competitors.

The Belgian Automobile Board of Trade has set January 23 to February 4 for its third annual show, which will be held in Brussels.

GET "SHORT COURSE" IN MOTOR LAW

Police of Washington To Be Instructed Thoroughly In Interpretation of New Regulation—Age Limit Squabble

Washington, D. C., Aug. 29—The latest thing in Washington is a "school for police," which the superintendent of police has just inaugurated and which will serve to instruct the guardians of the peace in their responsible duties. It is the intention of the superintendent to pay particular attention to the new automobile regulations, which will go into effect today after much opposition, agitation and a hard legal fight. It has been contended all along by various owners of automobiles that these regulations would be applied in such a way as to work great hardship to them, and there have been those who have asserted that the individual members of the force would take advantage of the power given them by the law to force their presence on women operators, to their great embarrassment.

WILL SEEK DIGNITY

Discussing this question with a MOTOR AGE man, Major Sylvester stated emphatically that it is his determination that no reasonable protests shall be necessary. It is his intention to call all of the sixty members of the bicycle squad before him and expound fully to them the nature, extent and purpose of the new regulations. The men will be informed that the aim of the law is not to persecute automobilists, but only to prevent their disregarding the lives and safety of pedestrians.

When it is known that the men have thoroughly grasped the purposes of the new law they will be sent forth with instructions to arrest every violator, but in no case to persecute the automobilist. They will be told that their evidence of a violation must be incontrovertible in order that the attitude of the police on this question may from the first be recognized as both consistent and dignified.

AGE LIMIT DISCUSSED

The district commissioners still have under consideration the question of limiting the age to 18 years in granting permits to operate automobiles. Protests against the age limit have been pouring in upon the commissioners and they come not only from the dealers, who employ many young fellows in their respective establishments, but also from a number of wealthy men whose sons have become adepts in handling automobiles and who do not relish the idea of having to give up the fascinating sport. The dealers, while they do not advocate issuing permits to irresponsible boys, maintain that there are any number of young fellows in Washington who have had several years' experience in handling cars and it would be a great injustice to deprive them of the right to operate an automobile simply because they were under 18 years of age. It is pointed out that no objection is raised in granting permits to women, who are exceedingly liable to lose their heads in an emergency, while young men with strong nerves and undoubted ability in handling automobiles are not allowed to take the examination for a permit because they happen to be a trifle below the limit in age.

DEALERS HAVE YOUTHFUL DRIVERS

Every automobile establishment here has from one to five boys employed to drive machines from the garage to patrons' homes,

and it is hardly possible that the dealers would intrust valuable machines to them if they were not competent and capable. If these boys were reckless, it would make their employers liable to damage suits and cause untold trouble. But they are exceedingly careful and it is felt that they should not be deprived of their positions, which they will be if the age limit prescribed by the automobile board is sustained by the commissioners.

FINAL WORK FOR BIG FAIR MEET

Syracuse Club Getting Ready for Long Heralded Event—Ask City To Fix Streets for Benefit of Visitors

Syracuse, N. Y., Sept. 1—The Automobile Club, of Syracuse met last week to elect a president in place of Terrence D. Wilkin, deceased. Willet L. Brown, a prominent druggist, was the choice of the body without opposition. He is a member of the firm of Brown & Dawson and has long been an enthusiastic automobilist. George S. Larrabee was chosen second vice-president, the position Mr. Brown formerly held.

The matter of the race meet at the state fair was thoroughly discussed. Posters are being placed up all over the state and the club authorized Secretary Fred H. Elliott to go to New York and boom the meet. Mr. Elliott has gone on this trip and will spend several days. A letter was read from Charles B. Shanks, of Cleveland, asking the club to make a proposition in the matter of bringing Barney Oldfield here to make a trial against his own world's mile record on September 12. The club is now in communication with the flyer.

The club appointed George Larrabee, H. W. Smith and W. A. Fancher a committee to urge upon the commissioners of public works the necessity of fixing up some of the pavements before state fair time. The supervisors will also be asked to see that country roads are in as good shape as possible.

Secretary F. J. Wagner and W. H. Baker, of the Buffalo Automobile Club, attended the meeting and stated that the Buffalo club would make a trip here on the day of the races and take part in the parade. Mr. and Mrs. Wagner and Mr. and Mrs. Baker came from Buffalo in a touring car.

CANTON WANTS TO SEE RUN

W. H. Smith, mayor of Canton, O., has written the N. A. A. M. urging that the route of the endurance run be made to include Canton. Mayor Smith suggests that as the distance is sixty miles from Cleveland on the way to Pittsburg, it could be made a noon control. He says the roads east of Canton through Alliance and Salem or through Alliance and New Lisbon are fine excepting some hills, most of which would be down grade to Beaver, whence the run could continue along the Ohio river bottom lands all the way to Pittsburg. Mayor Smith says his city will suspend the 8-mile an hour speed limit and afford ample police protection.

It was said at N. A. A. M. headquarters that there was little probability of the route being changed, much as a visit to McKinley's home would interest.

A. J. Picard has been given a gold medal by the Empire City Trotting Club for his services as clerk of the course and starter at the recent meet at Yonkers. Mr. Picard has been secured to act in the same capacity at the Syracuse and Providence tournaments.

THE SURVEYOR'S PROGRESS IS SLOW

Secretary Unwin of the N. A. A. M. Is Hindered In His Endurance Run Prospecting Trip By Rain and Muddy Roads

Rheumatism and aches and pains of divers kinds have been the lot of Harry Unwin and William Arber the past week during their final survey of the endurance run route. Since the two men started from New York in their Searchmont they have encountered rain every day until their arrival in Buffalo. As they had made no provision for a continuous down-pour, they occasionally became damp around the edges, and as a result both have contracted rheumatism.

ALMOST AN ACCIDENT

The outlook was somewhat depressing, but as the car was all right, the travelers decided to continue on toward Cleveland Monday. The roads from Buffalo westward are fairly hard and they thought they could make about a 10-mile gait.

The tourists had a close call last Friday morning. While going along on third speed the car skidded nearly over a 4-foot bank, but Arber managed to swing it over the other bank, which at that point was a drop of less than a foot. A few feet either way would have overturned the car. As it was, the car stopped with its nose turned toward New York instead of Buffalo. The road between Batavia and Buffalo, in some stretches, is good, with a hard, smooth surface when dry, but very slippery when wet. It is dangerous to travel faster than 6 or 8 miles an hour along this road in wet weather.

POLICEMAN CUT CROSS LOTS

On Saturday there was a streak of sunshine for a short time, and this was taken advantage of by making a run through the parks of Buffalo. The car was running on fourth speed, which is about 30 to 35 miles an hour, and as the roadways were deserted no danger of arrest was feared. As the car rounded a sharp turn a bicycle policeman blocked the way, causing the driver to come to a sudden stop. The policeman explained that the law was being considerably dented, and as he had found it impossible to catch them by following the car, he had cut across and headed them off. Unwin apologized by saying they were "strangers from the country" and did not know they were violating the law. The policeman accepted the apology, Unwin's card and a good cigar, and then said it would be "inhospitable to cause any inconvenience to a visitor," and after complimenting Arber on the splendid control of the car, he told them to go ahead. Unwin thanked him and assured him that he would be favorably reported through the president of the Buffalo Automobile Club for his vigilance and courtesy.

FAST MOTOR BICYCLE RUN

A remarkable run on a California motor bicycle was made August 10 by Glenn Lombard from San Francisco to San Jose, Cal. Mr. Lombard is a resident of San Jose, and being anxious to get his machine he went to San Francisco on the train, and after assisting at the factory in assembling the parts of the motor cycle, gave it a series of tests, and finally started for San Jose over the steep Mission hill road. The hills were climbed without difficulty, but it was not until he left San Mateo that high speed was attained.

At one point between San Mateo and Redwood City exceptionally fast time was made over about 6 miles of good road. Here the county road parallels the Southern Pacific railroad for several miles. A train came along while Lombard was speeding over this section, and in a distance of 3 miles he passed it. On some stretches miles were cut off at the rate of 1:08, and an average of 2 minutes was made for the whole distance. The time between the two cities was 1 hour and 44 minutes.

The California motor cycle, which Mr. Lombard rode, was equipped with a 2½-horsepower motor and 1¼-inch belt transmission. The tank carries a supply of gasoline capable of carrying the rider 100 miles. It was a regular stock machine, turned out in the regular way.

COOPER READY FOR DETROIT

Professional Racer Sufficiently Recovered From Sickness To Meet Oldfield—New Canadian Regulation

Detroit, Mich., Aug. 30—The rivalry between Tom Cooper and Barney Oldfield will have an airing at the local race meet, which is booked for the Grosse Pointe track September 7 and 8. While Cooper has not entirely recovered his strength since an operation for appendicitis, he states that he will be well enough to clash with Oldfield. At any rate Cooper has regained his old confidence and is more than anxious to tackle Oldfield at the Pointe.

Three other important entries have been received. These are from Sincholle, with his 40-horsepower Darracq; F. A. La Roche, of New York, with a similar Darracq, and Henri Page, with a 40-horsepower Decauville. The three will race in a special event and will also compete in the open races.

The Detroit Automobile Club has been notified of a new law regarding tourists who enter Ontario from the States, and which goes into effect on Tuesday. The new rule permits the customs officers at ports of entry to act as license officers for automobiles. The license fee is \$2 and for a marker bearing an aluminum number 3 inches high \$1 will be charged. The license is good for 6 months, but each owner of a motor car must surrender his marker upon leaving the province, when the \$1 will be refunded. The officer is allowed to retain 50 cents as a fee for his work. This ruling will hit local motorists hard, as this city is but a ferry ride from Windsor, and consequently money must be paid out every time a machine touches the Canadian port. It will also tend to discourage touring in Ontario, in which Detroiters find considerable pleasure and recreation on account of the pretty country and excellent roads.

A. C. A. TOUR IN SEPTEMBER

New York, Sept. 2—[Special Telegram]—It has been decided by the Automobile Club of America that its autumn club run or tour will be started from the club house September 25. Hartford, Conn., will be reached that day, and Boston Saturday noon. Saturday afternoon and Sunday will be spent in Boston and the club men will continue to Springfield, Mass., Monday. The Tuesday trip will be to Poughkeepsie, N. Y., via the Berkshire hills route. The final run home will be made Wednesday. The total journey will be 527 miles. Already thirty members have enrolled for the trip and it is expected that this number will be doubled.

DISCOURAGING RIDES IN THE RAIN

Bad Weather and Worse Roads Characterize the First Stages of the British 1000-Mile Motor Bicycle Endurance Test

London, England, Aug. 22—There were forty-three competitors and nearly as many spectators to witness the start of the 1,000 miles reliability trials for motor cycles organized by the Auto-Cycle Club of Great Britain, on the morning of Tuesday, August 11. The reason for the scant attendance of spectators was that the start was made at a very early hour, and heavy skies betokened rain. The gloomy weather was in the main responsible for the absence of onlookers.

INAUSPICIOUS START

The start was made at 8:15 a. m., and by 8:30 all the machines were off. Permission to drive inside the Palace grounds had been denied so the machines had to be wheeled up the path to the entrance. Some of the competitors started their motors as they ran and when they reached the gate were able to spring into the saddle and get on the road to Canterbury without delay. The weather was bad all day and the riding was over heavy roads. Only three riders failed to complete the journey, and thirty-one had returned to the Palace by 6:20 p. m.

The ride on Wednesday was to Brighton by way of Lewes and Uckfield, returning by Westerham hill, a total distance of 107 miles. This hill was considered the worst of the whole trials, and it proved very trying on most of the competitors. They had ridden 87 miles before it was reached, and after the heavy rains of the day before, the prospect of climbing the 1¼-mile slope of the hill was not a cheerful one. Only seven machines negotiated the ascent, and of the forty starters, thirty-four finished the run.

POLICE WATCH CONTESTANTS

The weather cleared up on Thursday, so that the trip of 108½ miles to Worthing and back

was made under fairly good conditions. There were thirty-four starters, and only one failed to reach the Palace in the minimum time. Police traps were plentiful and a number of riders were asked for their names and addresses.

The long ride of 125 miles on Friday to Eastbourne and return was distinguished by the worst weather of the week. There were thirty-six starters, and with few exceptions they made an extraordinarily good showing. The course was very hilly and the roads heavy, and the competitors were glad when the journey was over. The first arrival at the Palace was not until 6 o'clock, and the last trailed in at 10 o'clock. Collisions with dogs and cows during the week caused some of the failures of the cycles to continue the trials, while some minor defects compelled other competitors to give up.

On Saturday and Sunday the cyclists rested, and the trials were resumed on Monday morning.

AUTOMOBILE DAY AT DENVER

Automobile day will be celebrated at Denver, Col., September 10. The Denver Automobile Club will take charge of the racing events. The prizes for the different events will be gold, silver and bronze medals. There may be an endurance run on September 9, with a finish at the City Park on the following afternoon. In the evening it is proposed to have an illuminated parade.

QUICK MOUNTAIN ASCENT

L. J. Phelps, of Stoneham, Mass., climbed Mt. Washington, N. H., August 25 in 1 hour and 46 minutes with a Phelps gasoline car. He was timed by the official representatives of the Chronograph Club, of Boston, F. C. Sutcliffe holding the watch at the bottom, and R. C. Dunham at the summit.

The three German representatives who drove in the Gordon Bennett race have been presented with gold medals by the German Automobile Club.

A SEVERE TEST OF RELIABILITY

September Contest Under Management of Automobile Club of Great Britain To Be No Sinecure—Outline of the Run

The fifth of the series of reliability trials promoted by the Automobile Club of Great Britain and Ireland will be held September 18 to 26. The trials will continue over 8 days, during which time 1,019 miles will be covered. Everything done to the car from the time it is given into the judges' hands until the conclusion of the trials will be charged against it. Marks will be deducted for every repair, replenishment, adjustment or renewal throughout the whole period. The trials are for reliability only, and excess of the speed limit will not be permitted. Marks will be awarded for every important quality, such as efficiency of brakes, condition after trial, restarting on hills, and absence of noise, vibration, vapor or smoke and dust.

THE DIVISION OF THE RUN

All cars entered must report at the Crystal Palace by noon on September 15. The following 2 days tests of brakes will be held, photographic records of the amount of dust raised by the cars will be taken and the judges will examine the cars.

On September 18 the first run will be made to Margate and back, a distance of 150½ miles. On September 19 the run will be to Eastbourne and back, 121 miles, with a hill climb on Westerham hill; Monday, September 21, to Worthing and back, 118¾ miles, with a hill climb on Bury hill; Tuesday, to Folkstone and back, 137½ miles; Wednesday, to Southsea and back, 144½ miles, with a hill climb at Hindhead; Thursday, to Bexhill and back, 121½ miles, with speed trials on a track; Friday, to Winchester and back, 133½ miles, and on Saturday to Brighton and back, 91¾ miles, with a hill climb at Handcross hill. On Monday and Tuesday of the following week the judges will make a detailed examination of the cars in order to award the marks for condition after the 1,000 miles of running.

Early in next year trials for light delivery motor wagons will be held.

THINK EARLY OF 1904 MOTOR DERBY

Berlin, Germany, Aug. 20—That the Germans are taking keen interest in the Gordon Bennett cup race for 1904 is shown by the fact that many of the daily and weekly papers which heretofore have not given much attention to automobile matters, have adopted the reverse policy. It is the general belief that the victory of a German car in the international race last July did more for the German automobile trade than any other event in recent years and the natural consequences will be, that instead of one German manufacturer building racing cars, there will be a half dozen if not more, and that all of these will be eager to compete in the trial races for the selection of next year's German team for the big event.

It is stated that the Mercedes factory will have two out of the three German cars, and such houses as Benz, of Mannheim; de Dietrich, of Miederbronn; the new Automobile Gesellschaft of this city, have already made application for entries in the trial races. Jenatzy will be a sure driver, of one of the Cannstadt cars, and Baron de Caters has also been advised that his services will be gladly received. Of all the other German drivers, Bar-

During the Hill Climbing Contest



FROM THE AUTOMOTOR JOURNAL

Typical Ride Through the Rain

beroux, of the Benz company, seems to stand the best show. He has been very successful this season in driving the Benz to victory and is recognized as one of the ablest German drivers. That the race will take place on German soil seems sure as the automobile club committee is working hard on plans and maps and is not sparing either efforts or money. Automobilists well posted as to the German roads think that those located in the Duchy of Mecklenburg, while not perfection, would be the best, especially because there are but few villages and inhabitants along the principal ones, which would make the race itself safer than when run through crowded territory.

GOOD TIME FOR WOLVERINES

Chicago Club Men To Entertain Grand Rapids Automobilists 3 Days—Many Runs Scheduled

The Grand Rapids, Mich., Automobile Club will be entertained by the Chicago Automobile Club on Friday, Saturday and Sunday next. The members of the Grand Rapids club with their families will arrive Friday morning, coming over by boat. There will be about a dozen machines and probably thirty people in the party.

A committee consisting of Frank X. Mudd, W. W. Lowe and W. H. Hoops has been appointed by the club to receive the guests at the boat landing. Several other members of the club, with their wives, will also be on hand to welcome them. The visitors will be taken to the Auditorium Annex and their cars left in the club house garage adjoining. The morning will be spent by the visitors in shopping, and at noon luncheon will be served at the club house.

At 2 o'clock the party will start for a run north, through Lincoln park, and over the Sheridan road to Fort Sheridan, where they will view the special drill and dress parade at 5 p. m. Dinner will be served at 7 o'clock at the Moraine hotel. The return trip to Chicago will be made by moonlight.

On Saturday at 2 p. m. a tour of the boulevard system and the parks will be made, arriving at the Chicago Beach hotel at 5 p. m. The club house will be reached by 8 p. m., giving the visitors an opportunity to attend the theaters.

On Sunday afternoon at 2:30 o'clock a run will be made to La Grange by way of Riverside, stopping at the Golf Club grounds at each place. The return trip will be made in time to load the cars on the boats at 6:30.

The scheduled run to South Bend, Ind., for September 5 and 6 has been abandoned because of the visit of the Grand Rapids club.

QUICK TRIP FROM LONDON TO GLASGOW

The second non-stop run from London to Glasgow was made last month by A. E. Perman with a two-cylinder, 10-horsepower Gladiator car. He started from Regent street at midnight on August 10 and arrived at Glasgow the following night at 10:10 o'clock. Two stops were made because of a puncture and a leaky valve, but the engine was kept running during these stops. The distance was 450 miles and about 22 gallons of gasoline was used. The car was driven back to London the following day, and no adjustments or attention of any kind was given the motor except necessary oiling.

PLUG THROUGH MUD FROM OMAHA

Party of Nebraskans Drive Touring Car Over Wretched Roads To Chicago—Cleveland Races the Objective Point

The trail of the transcontinental tourists from Omaha, Neb., eastward, has been taken by an Omaha party, which is now successfully plowing its way through Indiana novelists and Ohio statesmen, and incidentally enjoying the good roads of those states. The party consists of Mr. and Mrs. C. E. Wilkins, B. C. Russell and Frank Decker, of Omaha, and they are traveling in a Winton car. They arrived in Chicago last Sunday, where the day was spent with Mrs. Wilkins' brother, W. J. B. Gram, of 2156 Gladys avenue, while the car was being cleaned at the local Winton store.

WORST ROADS IN IOWA

The start was made Friday, August 21, at 5 o'clock in the evening. The run to Atlantic,

town, Belle Plain, Cedar Rapids, Clinton, Ia., Sterling, Ill., Dixon, De Kalb, Geneva and Wheaton. At Wheaton one tire had become so badly torn that it was necessary to replace it with a new one.

The party left Chicago Tuesday, expecting to reach Cleveland some time Thursday. They will stay there during the races and then start on the return journey to Omaha.

LITTLE CHANCE FOR BLUFFING

Substantial Deposit Must Accompany All Entries for Preliminary Trials for British 1904 Cup Race Team

The selection trials for the British entries in the Gordon Bennett race of 1904 will be held by the Automobile Club of Great Britain and Ireland the latter part of next April. The cars must be produced for inspection at the Automobile Club not later than Saturday, April 16. Each firm entering must contribute \$250 for the first car and \$125 for each succeeding



The Wilkins Party of Omaha

Iowa, was made in 4 hours, and a stop made there for the night. From that place to Des Moines was easy traveling Saturday, and the following 3 days were spent in that city visiting the state fair.

Profiting by the experience of other tourists who had encountered bad roads on their eastern journey, Mr. Wilkins and party changed their route and went north from Des Moines to Ames, where they found better roads. The roads, however, all the way from Omaha to Chicago, were in bad condition because of the excessive rains, so that traveling was difficult. During 4 of the 8 days of the journey heavy rains were encountered and mud was found everywhere. The worst roads were in Iowa, and in some places they were compelled to tie ropes to the wheels to secure traction. When these wore out, chains were substituted. Between Stanwood and Clarence, Ia., the car stuck in the mud and it took three horses to pull it out. That was the only time outside assistance was necessary. There were no breaks in the machinery on the trip.

From Ames the route was through Marshall-

car, which amount will be used to defray the expense of organizing the trials. Each entry must be accompanied by a deposit of \$1,250, which deposit is to cover any number of cars entered by any one firm.

If the car does not conform in all respects with the requirements of the Gordon Bennett rules, or if, in the opinion of the committee of the club, it is not a bona fide racing car suitable to compete in the Gordon Bennett race, the \$1,250 will be forfeited. The object of this rule is to prevent a firm which might decide not to proceed with the building of a racing car from attempting to secure the return of the deposit by entering at the trials a car which would be unsuitable for the Gordon Bennett race.

If a car entered is not at the appointed place by noon on April 16, 1904, the deposit of \$1,250 will be forfeited.

After the selection trials three cars and drivers and reserve cars and drivers will be chosen by the club. The winners of the selection trials will not necessarily be selected to represent the club in the race.

THE BEAN EATERS IN FALL RACING

Boston Dealers Take Great Interest In the Sport—Kenneth Skinner Wants Return Match With Fosdick

Boston, Aug. 30—A. C. Morrison returned from the home office of the Peerless Motor Car Co., of Cleveland, O., a few days ago, and is now anxiously awaiting the arrival of the new 20 and 25-horse-power Peerless cars. He has already disposed of both cars, and can readily place several others. Only one of this year's models is now on the floor of the Boston branch, and a deposit has been placed on that, so really things are at a standstill here until Mr. Morrison receives a new shipment. The Peerless branch will be represented in the races at Nashua, N. H., September 10, J. L. Snow, who performed so successfully at Readville, having entered his Peerless.

SKINNER AFTER FOSDICK

Harry Fosdick, of the Winton branch, is to make a flying trip to Cleveland this week. Since Mr. Fosdick scored three wins at Readville on Memorial day he has been much sought after by race promoters. The Nashua management is anxious to get him to race there, while the Rhode Island Automobile Club is also endeavoring to secure his entry. Mr. Fosdick, however, has not made entry for any races, but it is expected that he will, in fairness, give Kenneth Skinner a return match either at Providence or New York. Mr. Skinner is homeward bound from France, where he secured a big racing machine. When off Sagahonack he wired the MOTOR AGE representative: "Challenge Fosdick for return match."

The last time these two men met in a match race was at Readville, Fosdick proving the winner. Skinner then said he would later defeat the Winton man and it appears that he is now in possession of a machine that may turn the trick.

TWO NEW BOSTON STORES

As hinted in MOTOR AGE a few weeks ago, T. B. Jeffrey & Co., of Kenosha, Wis., have opened a branch office in this city, under the management of Ernest A. Gilmore, who has covered New England for that company during the past 2 years. Mr. Gilmore has secured the premises formerly occupied by Bates Bros., and is now open for business. The store is elaborately fitted up and a full stock of accessories will be kept on hand. The company also has a large warehouse in this city, where it carries a sufficient quantity of Rambler cars to meet the demands of the adjacent agents. This move on the part of the Rambler people is considered an excellent one, as the car will naturally receive a greater amount of attention than it would be if it were sidetracked for other vehicles in an agency.

Another new establishment opened during the week is that of the Crest Mfg. Co., of Cambridge, Mass. R. F. Coburn has been appointed Boston sales agent, and he has secured the premises adjoining the Peerless company on Columbus avenue. These have been thoroughly overhauled, remodeled and made in every way suitable for an automobile salesroom. The office is to be opened on Monday, when all models of the Crest will be displayed. Mr. Coburn was formerly a member of the firm of A. J. Coburn & Co., he withdrawing from that firm in order to handle these machines, while the senior member of the old firm will

continue the business of manufacturing and selling the Commonwealth car.

George G. Reed, of the Reed-Underhill Co., sails for an automobile trip of Germany, France and England on September 15. He will take with him the first "waterless" Knox that has ever been carried abroad for touring purposes and will be away about 7 weeks. The machine is a regular stock car, finished in Brewster green striped in gold, and with a yellow running gear—with a most striking vehicle.

L. N. Spaulding, of Rochester, N. H., sails for England on the New England next Thursday for a 6-week tour of England and the continent. He carries with him his Winton touring car, with which he has toured the greater portion of New England.

RAMBLER FACTORY ENLARGEMENT

The style of construction of the new factory of Thomas B. Jeffrey & Co., of Kenosha, Wis., is somewhat unique, as it is of concrete throughout, and the building, when completed, will be as nearly fireproof as possible. It will have an open floor space of 275 by 256 feet, save for the iron columns supporting the roof.

Work on the track which adjoins the new factory building is progressing as fast as the weather permits. The track will be a half-mile, and will be surfaced with fine gravel so that it will be in condition to use practically all the year. Nearly a mile of railroad and switching tracks will be installed so that shipments will be much facilitated.

NEW MANAGER FOR CLEMENT PLANT

Ernest Roguet, a nephew of A. Clement, of Paris, has taken the management of the Hartford, Conn., factory of the A. Clement Cycle Motor & Light Carriage Co. He has had the experience of several years' work in the Paris factory of the Clement company, and thus comes to America well equipped to advance the interests of the concern here, both commercially and mechanically. Since his arrival at Hartford the working force at the factory has been doubled and work on motor bicycle sets is now being vigorously pushed. It is said that the demand for these outfits has increased greatly during the last few months.

CANNON TO TRY AGAIN

George C. Cannon is more anxious than ever to capture the mile track record for steamers. He has this season made two or three attempts, but each time failed owing to an imperfection in the boiler. He is now having a boiler constructed on somewhat different lines and fully expects to get the record at the Providence meet. Mr. Cannon says:

"This boiler will have 960 copper tubes of 18 gauge, a trifle heavier than those in old boiler, and with seventeen stay tubes to prevent the crown sheet from starting. It will be tested to 1,000 pounds cold water pressure, which will easily allow a working pressure of 600 pounds steam pressure. The feed water will enter the top of the boiler instead of the bottom. This is done so that when carrying a high pressure there will be no great difference in the temperature of the bottom crown sheet and the water to cause unequal expansion and contraction and consequent leakage. The holes in both crown sheets will be reamed taper holes and the tubes will be expended to that taper. This will insure a tight boiler, well able to stand the strain I shall put it to."

SAD DEATH AT CLEVELAND FRIDAY

Mrs. Alexander Winton Drowned In Lake Erie In the Middle of the Night—Mr. Winton Stricken With Grief

Cleveland, O., Sept. 2—The tragic death of Mrs. Alexander Winton last Friday was a terrible blow to her husband and the hosts of friends of both. The body of Mrs. Winton was found floating in Lake Erie near the Winton home at an early hour Friday morning, and it is supposed she fell from the cliff into the lake below.

Mrs. Winton left her room early in the morning while suffering from a temporary mental aberration, due to sickness, and wandered to the edge of the cliff, where she either walked or slipped over the bank and fell into the water. No one saw her from the time she left her bed chamber, so it is not known exactly how she met her death.

MANNER OF DEATH UNKNOWN

Mrs. Winton has been in poor health for some time, and her physician says she has been suffering from melancholia. A nurse was secured a short time since and Mrs. Winton placed in her care. Her condition was not such as to require close watching, and on Thursday night the nurse and family retired as usual. About 3 o'clock, as near as can be ascertained, Mrs. Winton arose from her bed and passed down the stairs and out at a rear door.

The night was dark and a heavy fog hung over the lake and the adjoining shore. Mrs. Winton was unfamiliar with the surroundings, as the family had just moved into the house, a new and delightful home, a few days before. The recent rains had loosened the earth at the edge of the cliff, and it is thought that a part of it caved in, throwing her over the bank. Shortly after she disappeared Mr. Winton awakened and missed her. A searching party was organized, but it was not until 7:30 a. m. that the body was seen floating on the lake, the discovery being made by Charles B. Shanks. The body was recovered by the life-saving crew, and after being taken to the undertaking establishment was removed to the residence.

Mrs. Winton was about 40 years of age and was a native of Scotland. Her maiden name was Jeanie McGlashen. She had been married about 20 years. Her husband and six children survive her. All of the children are under 16 years of age.

The funeral services were held Monday morning from the Lake avenue home and the remains were interred at Lake View.

STEARNS HAS TRACK RACER

Cleveland, O., Aug. 31—The F. B. Stearns Co. has completed a speedy car which will be used in the Cleveland races and probably in other events this fall. Strictly speaking the car is not a racer, as it is largely of standard construction. The motor is of the double cylinder, horizontally opposed type as used on the standard Stearns car and is rated at 24-horsepower. The chief difference from regular practice is that there is no speed changing device, the transmission being direct through a chain and a clutch operating against the fly wheel. The motor has a minimum speed of 100 revolutions per minute and has been run as high as 1,100 revolutions. The

frame is of channel iron, and is somewhat narrower than that of the standard car. The body is, of course, much lighter than standard. It is not claimed that the car will be a record-breaker, but Frank Stearns is satisfied after several trial spins that it will make 60 miles an hour.

The Stearns Company has completed a satisfactory season. It has never been the aim of this company to shine among the large producers of automobiles, but rather it has been the policy to build a few large cars, carefully constructed and finished and to sell them at a fair price. The output of the factory has been about thirty cars, all of which have sold at an average price of \$3,000, a number of them selling at \$3,500. All of these cars have been fitted with 24-horsepower motors and in the majority of cases have been fitted with unusually large bodies, capable of holding six passengers.

HEAVY FREIGHT CARS THIS TIME

New Manufacturing Company for Detroit Departs From Prevalent Policy of Runabout Building

Detroit, Mich., Aug. 30—Detroit's growing prominence in automobile manufacturing is emphasized every week. Yet another company has been organized, the Commercial Motor Vehicle Co., its first meeting held, and officers elected as follows for the ensuing year: President, Dr. J. B. Book; vice-president, D. F. Simons; treasurer, A. F. Smith, and secretary, F. S. Evans. The board of directors consists of the officers and M. L. Williams, Hoyt Post, Leopold Freud, Charles Berg and K. K. McLaren. This company is in control of patents by which separate electric batteries can be applied to all four wheels of an automobile and it is the intention to manufacture vehicles for hauling heavy freight. For the present, the company has leased a temporary factory on St. Antoine street, but it is the intention to erect next spring a big plant and employ a large force.

Much interest is being evinced by local dealers in the new Oldsmobile delivery wagon, the first of its kind appearing at W. C. Rand's store. This first experiment presages a brisk sale. It has been the intention to construct this machine on the basis of economy—selling it for \$800. Easy of operation by inexperienced persons is also one of its avowed advantages. The experiments on the streets have been gratifying.

"August was a dull month for we dealers," said William E. Metzger to a MOTOR AGE representative. "It is picking up now, however, and in September and October, I look for exceptionally good business. What makes me form this belief is the sudden attack of touring fever here. It seems that everyone is planning some sort of tour for the fall months, which is the most delightful time of the year

for that purpose. The roads are generally good, the air invigorating and the sweltering days are then over. I, at least, anticipate a rush in the next 2 months and will be prepared for it."

PREPARATIONS FOR ST. LOUIS

Syracuse Company Contracts for Space and Plans Extensive Display—Picnic for Motor Car Builders

Syracuse, N. Y., Sept. 1—The H. H. Franklin Mfg. Co. has contracted for 1,200 square feet of space in the transportation building at the St. Louis world's fair. Anticipating that this exposition will include one of the most complete exhibits of motor cars ever made, the Franklin company will try to show something of a novel nature, such as a machine cut lengthwise, showing the cross section, and a skeleton rig showing all the parts in operation. There will also be a full display of the 1904 small cars and the new 20-horsepower, air-cooled vehicle which has just been turned out. H. H. Franklin and C. A. Benjamin will attend the opening and a man from the home office will be in charge during the fair.

The Franklin company closed down for a week last Saturday and gave a picnic for all its employees at Three Rivers, uniting with the Pass & Seymour employees. A ball game between the two factories was played. C. A.

next week. Mr. Wilkinson is touring New England in one of the New York agency's cars.

The Brennan Motor Co., Industrial building, has materially enlarged its capacity and is shipping out more motors for automobiles than ever before. The company will furnish drawings to such of their customers as desire to make automobiles. They furnish a choice of seven different styles. Both chain and bevel gear drive are provided. The company is also shipping a large number of sliding gear transmissions, three speeds forward and reverse.

Albert E. Ballow has started a suit against the H. H. Franklin Mfg. Co. to recover \$1,000 damages for being hurt by a Franklin automobile which he claims was operated by an employee of the company. He claims that no warning was given of its approach.

All of the makers are interested in the coming state fair race meet.

MOTORING GARMENTS PROMINENT

At New York Fashion Show In Madison Square Garden Leading Exhibit Is of Automobile Clothing

New York, Aug. 31—The first annual fashion show opened at the Madison Square Garden this evening and it is characteristic of the times that one of the principal exhibits

was that of automobile clothing. Saks & Co., the dry goods firm making this exhibit, devote their extra space to the latest fashions in automobile attire arranged in a manner that compels attention. The floor of the exhibits consist of artificial grass crossed at different points with gravel walks. Two Renaults and a Peugeot having figures dressed in clothes which have been decreed by the Paris artists as being the very latest for automobile wear add to realistic scene. Saks & Co. have exclusive control for America for the products of O. Ström et Fils, of Paris, the

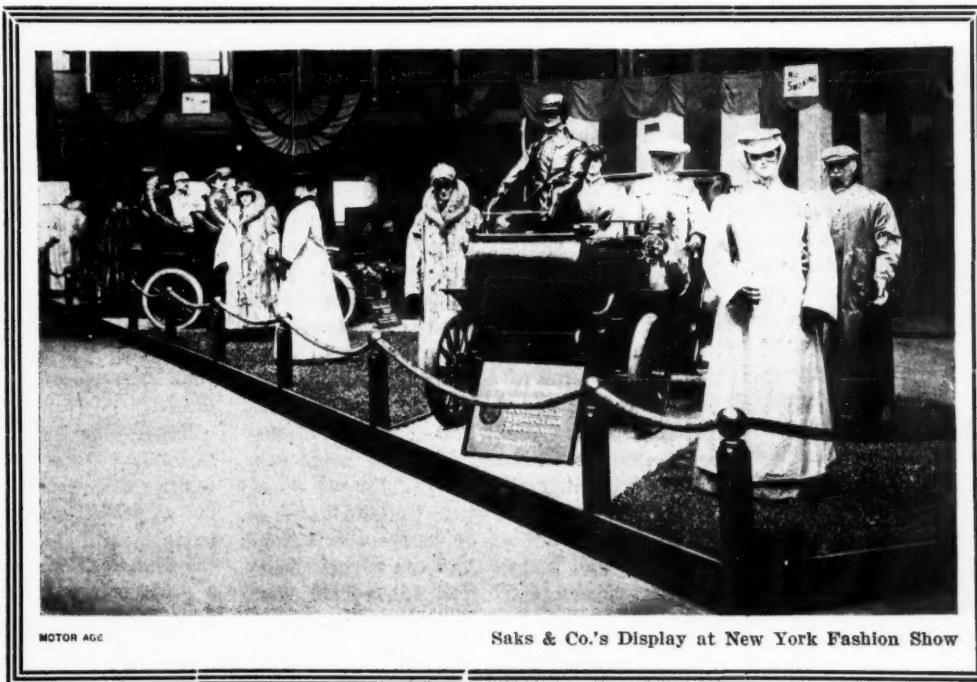
official tailors and designers to the Automobile Club of France, and the styles are being generally adopted in this country.

DETROIT COMPANY CHANGES NAME

The LaFayette Automobile Co. is the name of the new \$400,000 organization formed last month at Detroit, Mich. It was the intention of the company to adopt the name of The Mohawk Co., but after preliminary organization, it was found that a company bearing that name was in existence at Indianapolis, Ind., and the name was therefore changed as stated.

SHOW SPACE ALLOTMENT

Application blanks for space at the New York show will not be issued by the N. A. A. M. until some time between September 7 and 10, and the first allotment of space will be made 2 weeks later. The blanks for the Chicago show will be issued September 25.



Benjamin was master of ceremonies and outdid himself to see that the men had a good time. It is the custom of the company to close for a week every year to allow the men to have a vacation. During the week's vacation the machinists' union, which was worsted in their strike at the Franklin factory, will attempt, it is said, to tie up the factory again, but it is thought that their efforts will not amount to anything, as all the men now employed are anxious to have positions this winter. Not a striker was taken back and the company has gradually filled their places with non-union men.

As soon as Engineer John Wilkinson returns from his vacation the Franklin company will begin to turn out their four-passenger, 20-horsepower car. The tests of the one already made have shown a stillness in running, a speed and a hill climbing capacity that is remarkable. This, with a full line of other cars, will be shown at the New York state fair

TRADE WAR CLOUD GATHERING

W. H. Chamberlin, a Chicago Patent Attorney, Claims To Be Prepared To Protect Outsiders in Case A. L. A. M. Brings Suits for Infringement of Selden Patent—Leader of Licensed Makers Declares He Is Not Worried

New York, Aug. 31—Quite a breeze has been stirred up in this city the past week by Walter H. Chamberlin, a member of the law firm of Chamberlin & Wilkinson, whose offices are in the Marquette building, Chicago. Mr. Chamberlin was assistant commissioner of patents during the McKinley administration and is a former official of the Chicago Automobile Club.

Mr. Chamberlin set up his headquarters at the Waldorf-Astoria and gave out the tip that he had something to say of interest to the newspaper men. A MOTOR AGE man was the first to see him.

DEFENSIVE CONTRACTS

"The automobile trade is scared to death," said he, "over the Selden patent and the threats of the Licensed Association of Automobile Manufacturers. All they need is the assurance that they will be freed from litigation and that they may put their capital to use without their credit being injured at the banks or their agents deserting them through fear. There are fifty responsible makers of complete automobiles not members of the A. L. A. M. and fifty part makers, who may be made contributory infringers."

"I have just been appointed special counsel of the Patent Title and Guarantee Co., of the Tacoma building, Chicago, and 149 Broadway, this city. E. E. Ayrault is its chief attorney and W. H. Doolittle its patent attorney at Washington. The company has been established several years and has a capital of \$500,000."

"This company usually issues defensive contracts only when litigation has actually begun. In this case, however, it has agreed to conduct any litigation and insure a manufacturer against any judgment awarded under the Selden patent. I have discovered an anticipatory patent, which I will disclose when litigation begins. The patent company believes with me that the Selden patent is invalid and can be proved so to be when the fight is made. We propose to send out our agents among the independent manufacturers and make the offer of which I have just told you."

The MOTOR AGE man forthwith sought George H. Day and found him at the Manhattan hotel on the Wednesday evening in question.

Mr. Day without hesitation made the following statement, which is here quoted word for word:

"Yes, I know Mr. Chamberlin. He came to me about two months ago with a proposition that the Association of Licensed Automobile Manufacturers should give him an annual retainer in consideration of his not appealing a certain case, which one of his clients did not wish to spend more money on. He seemed to think that the decision was of great value to the association as it stood, but if no retainer arrangement could be made with us, he contemplated getting a group together who would employ him to carry the case to the supreme court."

"The executive committee did not see the

matter in the same light, and declined to make any arrangement with Mr. Chamberlin. He remarked at that time that it would not be long before the association would regret this, and would be paying him a much larger retainer than he then asked."

"About 3 weeks ago Mr. Chamberlin called at my office and stated that he had discovered a patent so classified in the patent office that it would not be likely to be discovered in any search made for an anticipation of the George B. Selden patent, No. 549,160, but that, in his opinion, it was in fact a pure anticipation. He suggested that the association should give him an annual retainer covering a period or until such a time as this patent should be set up in an answer in a suit under the Selden patent, and that if he was not employed under retainer he should feel that with such information in his possession it would be his duty to interest those not members of the association in a defense against the patent, which, it would seem from what you say, he is now attempting to do."

"When Mr. Chamberlin disclosed this patent it was discovered that it had been considered by the attorneys of the Electric Vehicle Co. before that company made any definite arrangements with Selden under his patent, and that later it was set up in the answer of both the Winton Motor Carriage Co. and Buffalo Gasolene Motor Co. in the suits brought against them by the Electric Vehicle Co. In view of these facts the association was unable to see that it was for its interest to retain the services of Mr. Chamberlin, and furthermore the patent in question is considered of no importance."

Mr. Day also had the following to say with reference to the point raised by Mr. Chamberlin that part makers might be made contributory infringers:

"It is a fact that parts makers under a patent like the Selden would be contributory infringers, and there have been several cases that have been settled in the courts with regard to contributory infringers. The association has not felt called upon to seriously consider this question, as the responsible parts makers of the country seem disposed to co-operate with our members, as they recognize that they are doing 90 per cent of the business and are likely to stay in the business and be valuable customers in the future."

TAKES MONEY TO FIGHT

William A. Redding, who has been prominent in Selden patent litigation from the start, the next morning answered the MOTOR AGE man's questions by the following statement:

"This anticipatory patent which Mr. Chamberlin claims to have discovered," said he, "is not new, and is absolutely of no value whatever. It was one of those I ran across in investigating the Selden patent previous to the purchase of the exclusive rights under it by the Electric Vehicle Co. I investigated all the patents here and in Europe, at a cost of \$10,000, and the result was that the

Electric Vehicle Co. was advised by Mr. Betts and myself that it could be bought with safety, as it was."

"In all the litigation that has occurred the defendants have failed to unearth a single patent not referred to in our report to the Electric Vehicle Co. Mr. Chamberlin's 'discovery' was cited as part of the Winton and Buffalo defenses."

"I know very little of the Patent Title and Guarantee Co., but such a policy as they are said to propose to issue will be a very dangerous risk. To properly defend a single suit will cost not less than \$25,000, and if fifty suits should be brought the cost is easy to figure, to say nothing of the aggregate of damages to be paid should the Selden patent be sustained. It cost Col. Pope \$30,000, and the subsequent association \$40,000 to fight the Smith bottom bracket suit in the bicycle days. The defense would be under much heavier expense than the prosecution, for it would have to labor at the oars and find the anticipations."

Mr. Day, when seen by a MOTOR AGE man today, said he had received no further communications or visits from Mr. Chamberlin. No news has been heard of any call yet made upon independent manufacturers by the agents of the Patent Title and Guarantee Co.

CHAMBERLAIN STILL IN EAST

Chicago, Sept. 2—Mr. Chamberlin is still away from Chicago and consequently MOTOR AGE could not prior to going to press obtain another interview with him.

TIN TAGS AND NUMBERS NOW

Boston, Aug. 29—Two days more and the revised statutes regarding the use of the highways by motor vehicles takes effect. Then professional chauffeurs must display the tin badges which resemble those worn by Colonel Waring's street cleaning brigade; all cars must be equipped with registration numbers and private drivers must carry their licenses with them. It is only a question of a short time when prosecutions under this law will commence.

There have been registered almost 1,500 automobiles, some 1,600 individuals have been registered as gentlemen drivers and only about 200 as professional chauffeurs. Of course these numbers will be materially increased within the next week, for it is generally admitted that a great many of the owners and drivers have been holding off until the last minute before they carried out the provisions of the law.

John Hector Graham, M. E., president of the Graham Co., of Boston, delivered an address on "Draft gear and spring buffers" at a meeting of the New England Railroad Club last February, and this address, together with a number of illustrations and several pages of descriptive matter about spiral springs, is embodied in the "automobile springs" edition of a booklet just issued by the company. President Graham has devoted 20 years to the study of leaf and spiral springs, and he says that when the spiral spring is properly designed and placed so it can exercise its true functions it will save first cost in wear and tear to equipment. While the address was primarily for railroad men, automobile owners and manufacturers will find it interesting and instructive reading.

A company was formed recently in Poland with a capital of \$132,000 for the motor car transport of passengers and goods in and around Varsovie, the capital of the country.

THE READERS' CLEARING HOUSE

USE OF RESERVE BATTERIES

Chicago, Ill.—Editor MOTOR AGE—In my gasoline automobile I have four dry batteries and four in reserve. When they are partially exhausted I couple them in series and use them for a while in this manner until I put in a new set. Will better results be obtained if they are coupled in parallel instead of in series?—W. G. K.

Better results will be obtained by coupling the cells in parallel instead of in series, when partially exhausted. Coupling them in series increases the voltage, while coupling them in parallel increases the current, which is the necessary factor for good ignition.

POINT OF LATE FIRING

Seattle, Wash.—Editor MOTOR AGE—What is the proper position or point of timing of the spark when it is fully retarded?—D. M.

When the ignition is fully retarded the spark should take place just after the piston has passed the end of the compression stroke, or at a point not to exceed an angle of 10 degrees on the downward stroke.

WORM GEAR TRANSMISSION

Topeka, Kan.—Editor MOTOR AGE—Is it practicable to use a worm gear drive as a means of power transmission on a gasoline automobile, between the speed change gear and the rear axle? The worm gear would be used in place of the bevel gear drive on the rear axle. What are the objections to this type of power transmission?—S. F.

It is entirely practicable to use a worm gear drive in the manner stated. A clutch, however, must be attached to the worm gear so that it may be disconnected from the rear axle, otherwise skidding of the rear wheels would result from the locking action of the worm gear. The only objection to the worm gear type of power transmission is the excessive wear on the teeth, due to the fact that the teeth have a sliding instead of a rolling contact.

FLY WHEEL DIMENSIONS

Cleveland, O.—Editor MOTOR AGE—I am constructing a bicycle motor, and am only going to use one fly wheel, which I intend to make 6 inches in outside diameter, $\frac{7}{8}$ -inch wide, the rim to be 2 inches deep. The motor is to be of $2\frac{1}{4}$ -inch bore and $2\frac{1}{2}$ -inch stroke, and is to have fairly high compression. The inlet and exhaust valve openings are to be $\frac{7}{8}$ -inch in diameter. Is this fly wheel heavy enough or too heavy for the motor?—A. T. M.

The dimensions given for the fly wheel are not large enough. Motors of standard make with practically the same stroke and bore have a fly wheel of $7\frac{1}{2}$ inches in diameter, $1\frac{1}{4}$ inches wide, and a rim 2 inches deep.

QUANTITY OF LUBRICATION

Lindsburg, Kan.—Editor MOTOR AGE—A few days ago I was troubled by the motor of my car stopping. After taking out the spark plug and cleaning it, the motor started, but stopped again in a very short time. It appeared that there was an excess of oil in the

crank case, so I drained the oil out of the crank case and the motor then ran all right and took the car home. As I had read in the MOTOR AGE of August 13, about "excess feed of oil," I reduced the oil feed to 10 drops per minute, but after running about 10 miles I found that this was not sufficient, and that the motor became very hot. As the motor of my car is rated to run at 1,800 revolutions per minute, it would appear that this is not enough oil to properly lubricate the cylinder.—A. E. A.

The trouble must be in the lubrication. If an ordinary sight feed lubricator is used, it may be that the oil supply is not being fed properly on account of the air pressure in the crank case. Eight drops of oil per minute is all that is required for a motor of standard make, running at 1,200 revolutions per minute and developing 6 brake horse power at that speed.

USE OF CALCIUM CHLORIDE

St. Ansgar, Ia.—Editor MOTOR AGE—I wish to use an anti-freezing mixture in the water jacket of a stationary gasoline motor. How much calcium chloride will it require per gallon of water to keep the water from freezing, and what is the cost per pound? I have a galvanized iron tank which holds 100 gallons. Will the calcium chloride in any way injure the iron?—O. H. K.

About 1 pound of calcium chloride is required to each gallon of water. The cost of the calcium chloride is about 20 cents per pound in large quantities. If pure calcium chloride is used, no injury will be done to the tank, but common chloride of lime is often substituted for calcium chloride by unscrupulous dealers.

COMPOUND GASOLINE MOTORS

Montrose, Pa.—Editor MOTOR AGE—Will you inform me through the Reader's Clearing House, what have been the difficulties encountered in building compound gasoline motors?—H. W. B.

As far as is known, no difficulties have been encountered in building compound gasoline motors. Compound gas engines have been built by Messrs. Crossley & Atkinson in England and by other concerns in Europe. The compound gas engine, as usually built, consists of three cylinders, two high and one low-pressure cylinder. A three-cylinder simple gas engine, occupying the same floor space and having the same general dimensions, however, will probably develop more power than the compound engine.

USE OF TWO INDUCTION COILS

Cleveland, O.—Editor MOTOR AGE—I have a vertical, two-cylinder motor of $4\frac{1}{4}$ -inch bore and $5\frac{1}{2}$ -inch stroke, with the cranks set at 180 degrees. I recently changed the ignition system in order to use a single induction coil; connecting one of the secondary wires to each spark plug, without any ground on the motor and with two spark plugs in series. I find that this plan does not work well on the motor, as the motor miss-fires badly and will not speed up as it did formerly. What is the reason for this? I understand this system is in use on several makes of cars.—E. K.

The system of ignition described is only applicable to two-cylinder motors, which explode at the same point in alternative revolution; that is, motors of the opposed cylinder style with crank pins at 180 degrees apart, or side by side two-cylinder motors with both crank pins in line. In a side by side, two-cylinder motor with the crank pin set in at 180 degrees apart, the explosions follow each other in succession, in one revolution, instead of at similar points in alternate revolution. On this account the core of the induction coil has not sufficient time to discharge or demagnetize itself between the two explosions. Two induction coils are necessary with this style of motor.

SPARK PLUG POINTS

Boston, Mass.—Editor MOTOR AGE—Is there any other metal which may be used instead of platinum for spark plug points? I have a double spark plug of special design, the platinum terminals of which are of unusual length. These terminals are bent or curved so as to form a letter U, the spark gap or opening being in the lower part of the bend. After using for some time, the terminals come apart, on account of the intense heat in the combustion chamber, causing a failure of the spark. I have tried piano wire, and while it will keep its shape better than the platinum, the points between which the spark jumps corrode very quickly.—S. T.

Iridio-platinum, which may be obtained from any large dental or jewelry supply house, will probably give the best results in the case specified.

REPAIRING BENT CRANK SHAFT

Chicago, Ill.—Editor MOTOR AGE—The crank shaft of my four-cylinder motor having become badly bent, through the breaking of one of the connecting rods, I am a little in a quandary as to how to have it fixed. Which will be the better plan, to have the crank shaft straightened or to have a new crank shaft made?—H. F.

If the crank shaft bearings are of sufficient size to stand turning down without seriously weakening the crank shaft, it might be straightened, new bushings for the crank shaft bearings would have to be made, however. The better, and in the long run the cheaper plan, would be to have a new crank shaft made, as in a crank shaft once bent and afterwards straightened, there is always a liability of a hidden fracture, which might cause more damage than the original trouble.

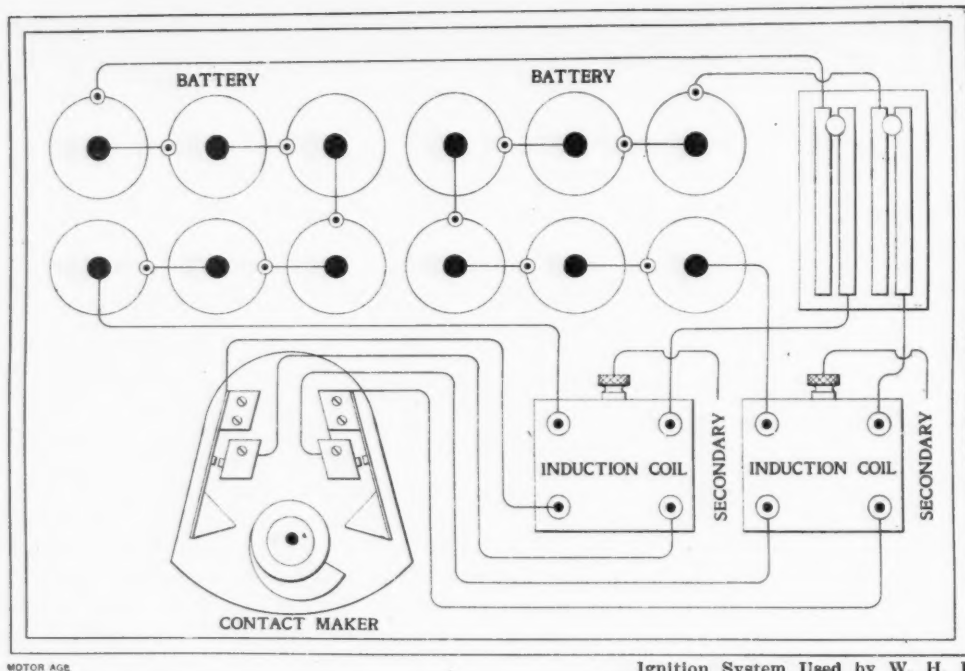
CHARGING 80-VOLT BATTERIES

Des Moines, Ia.—Editor MOTOR AGE—Is it possible to charge an 80-volt storage battery from a 50-volt light circuit. The battery consists of two sets of cells, twenty cells in each set?—J. M.

By using a four-pole switch the two sets of batteries may be charged in parallel and then by changing the position of the switch lever connected in series. Each set will be charged to 40-volts when in parallel and when afterward connected in series will give the required 80 volts.

EXPERIENCE WITH AUXILIARY EXHAUST

Kalamazoo, Mich.—Editor MOTOR AGE—The following incident may be of interest to the members of the Readers' Clearing House: A few months ago a friend of mine built a gasoline motor of 4-inch bore and 5-inch stroke, with an auxiliary exhaust port at the end of



MOTOR AGE

Ignition System Used by W. H. L.

the stroke. This auxiliary exhaust consisted of a $\frac{3}{4}$ -inch pipe tap hole, with about 4 inches of pipe and a stop-cock at the end of the pipe connection to the muffler. The motor ran nicely, and was considered cooler than before the exhaust was put in, but did not develop any power. The stop cock was closed, when the motor ran much better and was much more powerful. The motor finally stopped, and upon trying to start it again, an explosion occurred each time the piston reached the end of the suction stroke, due to burning gas left in the pipe in the auxiliary exhaust from the previous explosion. The pipe was taken out of the auxiliary exhaust opening, which was then closed with a $\frac{3}{4}$ -inch pipe plug. The motor then started readily.—H. A. T.

DISTRIBUTION OF FUEL ENERGY

Columbus, Ohio.—Editor MOTOR AGE—What percentage of the energy of the fuel used in gasoline motors is converted into useful work, and how is the balance accounted for?—W. M.

According to eminent authorities, the result of tests shows that the energy is distributed as follows: Water jacket losses 52 per cent, exhaust losses 16 per cent, losses by radiation, 15 per cent, useful work, 17 per cent.

RELATIVE VALVE SIZES

Plainfield, N. J.—Editor MOTOR AGE—What relation should the diameter of the inlet and exhaust valve opening of a gasoline motor bear to the cylinder diameter, for low and high speed motors?—F. G.

For low speed motors, the inlet and exhaust valve openings should not be less than one-fourth the cylinder diameter, and for high speed motors not less than one-third the cylinder diameter.

FAULTY IGNITION SYSTEM

Rock Island, Ill.—Editor MOTOR AGE—It appears that when owners or operators of automobiles are in trouble, they apply to MOTOR AGE for help. I had flattered myself on knowing all about the electrical apparatus of a gasoline motor, and thought that I would not have to resort to the Readers' Clearing House for information, but here I am, and here are my troubles. I have a car equipped with a double-cylinder air-cooled motor of $3\frac{1}{8}$ -inch bore and $3\frac{1}{4}$ -inch stroke. The motor is located under the rear of the body and connected

directly to the rear axle. I enclose a plan of the wiring. It is a double system, with one set of batteries and coil for each cylinder, and with a double plug switch. Each set consists of six dry batteries, a plain coil and a primary make and break device. After putting in a new set of batteries, everything is lovely, the motor runs fine and never misses an explosion. But unfortunately, this state of affairs only lasts a few hours at the most. Then the motor commences to miss-fire, and the next time the car is wanted the motor cannot be started. I have spent a small fortune in buying batteries and changing the mechanism, but it profits nothing. Would vibrator coils work better than plain jump spark coils, or would you recommend a dynamo instead of the batteries? The batteries appear torn down, even when not in use. Any suggestions leading to an elimination of these troubles will be greatly appreciated.—W. H. L.

Vibrator coils would give better results than plain jump spark coils. A dynamo could be used, but batteries would be necessary to use in starting the motor. The trouble must lie in the fact that the contact points of the contact maker are touching all the time, except when moved apart by the action of the cam. Under these conditions, assuming that the actual duration the make and break is one-sixth of a revolution of the fly wheel, the batteries would be on a closed circuit through the coil and contact maker for five-sixths of each revolution of the fly wheel, thus consuming an enormous amount of current. As to the batteries running down when the motor is not in use, there must be a ground or short circuit in the wiring which causes the trouble. The use of a commutator of the style illustrated in MOTOR AGE of June 18, and the plan of wiring shown in MOTOR AGE of February 26, in which only one coil and battery is needed, might be tried, a vibrator coil being used in this connection. This system is in use by several leading makers and is said to give excellent results.

THE ELICSON STORAGE BATTERY

Chattanooga, Tenn.—Editor MOTOR AGE—In the issue of MOTOR AGE of August 20, in an article on the Elicson "light storage battery." Has this battery been applied to any commercial vehicle, and if so, to what?—McK. M. & A. Co.

The Elicson light storage battery discussed in MOTOR AGE has, as far as is known, only been used on an experimental car in England.

WORN OUT COIL WANTED

Waterloo, Ia.—Editor MOTOR AGE—I wish to correspond with any one who has a burned-out jump spark coil. I will pay a fair price for one, as I wish to use it in an experiment. It is desirable that the make and style of the coil be mentioned.—S. A. A.

Replies to this communication may be addressed care of MOTOR AGE.

RESISTANCE OF METALS

Galveston, Tex.—Editor MOTOR AGE—What are the relative resistances of copper, iron and German silver?—G. M.

The relative, or rather the specific, resistances of copper, iron and German silver are as follows: Copper one, iron six, and German silver twenty-one.

ASSEMBLING FRENCH CARS HERE

Maurice Bouhon, 17 rue Brunel, Paris, France, writing to MOTOR AGE as a delegate for a number of French automobile manufacturers, says that the reasons why they do not succeed in getting more trade in the United States are the distance between the two countries; the transportation charges and the duty; the commission asked by agents, and the fact that certain periods of the year the demand is much greater than the output, thus preventing the filling of orders promptly.

To remedy this state of affairs the Frenchman makes two suggestions. First, he advises the forwarding to this country of the motor, either in parts or complete, together with the parts of the entire chassis, so that the car can be put up here with but little delay and trouble. The cars would be exactly like those sold in France, being assembled from similar parts and accessories, but the name could be left off if desired. The other suggestion is the establishment of a large factory for motors and complete cars made according to the plans, drawings and prints furnished by the French manufacturers, so that the cars and motors would be constructed exactly like those made in France.

For either one of these propositions the French manufacturers would send over some of their best expert mechanics to make or help finish the first cars, and instruct the workmen.

M. Bouhon is personally engaged in the endeavor to make some such arrangement and wishes to correspond with Americans who are interested in the subject.

TRACKLESS TROLLEY ADVOCATED

The building of trackless trolleys, or the using of motor wagons on ordinary roads instead by laying rails for the cars, is advocated by the Electrical Review. It says that the remarkable growth of the trolley roads of late hardly seems to be justified by the needs of the country, and asks if it would not be well, in many cases, to first try the trackless trolley. The expense would be far less, and if it were found not to pay, the loss would not be great. If the development were such as to make a railroad necessary, the loss would be practically nothing. The introduction of the trackless trolley would bring into the field a new ally for good roads, and automobilists and horse owners who are interested in road improvement would favor such a system.

FROM THE

The Friedman Automobile Co., of Chicago, has changed its name to the Ideal Motor Vehicle Co.

About a dozen members of the Chicago Automobile Club will attend the races at Detroit next week.

The La Crosse, Wis., fair will offer automobile races as an attraction on Wednesday, September 9.

France has a slot machine by which the batteries of motors can be recharged from electric street wires.

H. D. Ryus has taken charge of the retail sales department of the White Sewing Machine Co.'s garage at San Francisco, Cal.

The British war department has given a large contract for automobile furniture to the Daimler Motor Co., of Vienna-Neustadt, Austria.

The French motor factories employ large numbers of women in doing much of the work that is in other countries performed by men. Nor is all of this work limited to the so-called light class.

The date of the meet the Automobile Club of Philadelphia is to promote at Point Breeze Park has been changed from September 26 to October 10.

There have been 130 entries in the reliability trials for motor cars, which will be held by the Automobile Club of Great Britain September 18 to 26.

Dr. George G. Barnsdale, of Superior, Wis., is making preparations to establish a factory for the manufacture of a motor which he recently invented and patented.

M. de Griboiedoff, a Russian artillery lieutenant, with a few companions, have ridden from St. Petersburg to Paris, a distance of about 3,700 miles, in a light Peugeot car.

M. Lamberjack, president of the Societe Franco-Americaine d'Automobile, which has branches in London, Paris and New York, has sailed for Europe after a flying visit of less than a fortnight to this country.

Henry Goodman has been made general sales manager of the Woods Motor Vehicle Co. He has left the Chicago office of the company and established his headquarters at the New York branch.

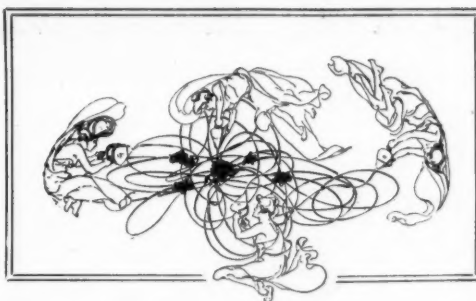
Notwithstanding the many unpleasant and irritating regulations in Italy, motor passenger and merchandise lines are rapidly becoming popular, and almost every week some new line is established.

Gustave Rives, who has managed all the Paris automobile shows, has been made a knight of the Legion of Honor of France. M. Rives is president of the French committee to the St. Louis world's fair.

The Miami Cycle & Mfg. Co., of Middletown, O., will put a motor Racycle on the market in 1904. The self-propelled Racycle will employ a Thor motor and chain drive, but will incorporate several original Racycle ideas.

The Automobile Equipment Co., of Indianapolis, Ind., has opened a store at 251 Jefferson avenue, Detroit, Mich., where it will handle rain aprons, chain and engine boots, detachable leather touring cases and automobile equipment of all kinds.

The Chicago police has begun a crusade against motorists who it claims are violating the speed ordinance on the North side, and



five arrests were made last Sunday. One was fined \$10 and another \$5, while the cases of the other three were continued.

There has been a rapid increase in the use of motor trucks this summer. In New York there are now over 200 of these vehicles in use and twenty licenses were taken out the last week in August by business men who expect to use automobiles to deliver goods.

The Videx Automobile & Carriage Co.'s plant at Marlboro, Mass., has been closed as the result of several attachments issued against the manufacturers. One attachment was placed at the instance of the Marlboro Carriage & Automobile Co., whose business was recently sold to the Videx company.

The secretary of state of Connecticut has issued a pamphlet giving a list of owners of automobiles, with the number of each machine. The total is 1,050. There are 224 automobiles registered by Hartford residents, showing a relatively larger proportion than any other city in the state.

The Matheson racer, which was built for the international cup race, is for sale. Although most of the parts are ready for assembling and the gears and engine are in place, the car will not be completed by the Matheson company, as it does not follow the lines of the present product of the company.

The county of Namur, Belgium, has established the following tax on automobiles: Motor cycles, \$4; cars up to 6-horsepower, \$10; cars over 6-horsepower \$20. For steam cars the tax will be \$1 per horsepower for cars up to 6-horsepower and \$2 for cars over that power. Commercial cars will be taxed uniformly \$4.

The visiting members of the Chicago Press Club will be given a 30-mile ride by the members of the Chicago Automobile Club on Saturday, September 12. The run will be over the boulevard and park system of the city, terminating at the Chicago Beach hotel, where the press club will give a dinner to the automobile club.

A Locomobile agency was established in Minneapolis, Minn., this week, through B. G. Sykes, of the Chicago branch of the Locomobile Co. of America. The firm that has secured the agency for the Locomobile product is Winston & Walker. Mr. Sykes left for the factory Wednesday to arrange for a big shipment of cars to the Minneapolis house.

Premier Balfour, of England says that a motor car going 20 miles an hour is far safer than heavy tram cars going 16 or 17 miles an hour, because it is far more in hand and involves far less risk. He thinks the new motor car bill will do a great deal to stop the inconsiderate driving which has done so much to rouse public feeling against motorists.

The Jackson Body Co., of Jackson, Mich., has been organized with a capital stock of \$18,000, and it is expected to begin the manu-

FOUR WINDS

facture of buggy and automobile bodies this fall. A factory with a capacity of 250 bodies a day will be built. Fred J. Keiser is president and general manager; Charles D. Frazier, vice-president and superintendent; Edward J. Schem, secretary and treasurer.

The board of directors of the Southern Interstate fair at Atlanta, Ga., will advertise the fair by purchasing an automobile and arranging a series of races between the machine and the railway trains entering the city. The first race proposed is against the Central of Georgia's morning passenger train from Macon to Atlanta. An automobile race on the fair grounds track will also be a feature of the fair.

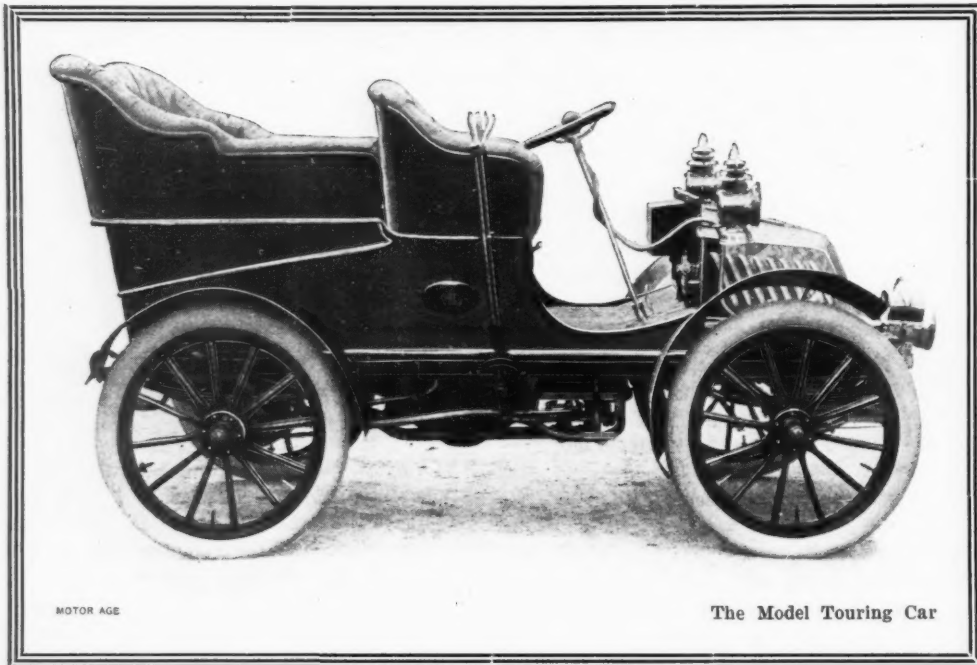
The date of the Spa Automobile Club meet is now fixed for September 4 to 7. On the fifth the 5 kilometer hill climb at Malchamps will take place, and the standing mile on the hill for the Spa cup will be run immediately after. On September 6 a circuit of 60 kilometers for tourist cars will be run, the maximum speed allowed being 20 kilometers. An appearance competition and banquet on the following day will bring the meeting to a close.

The annual Semmering hill climbing contest, one of Austria's important events, will take place September 13. It is open to motor cycles weighing less than 110 pounds; voiturettes, the chassis of which weigh not more than 880 pounds, with one passenger; light cars, the chassis of which weigh between 880 pounds and 1,430 pounds, with two passengers; heavy cars, the chassis of which weigh not more than 2,200 pounds, occupied by two persons. Cars having a magneto electric ignition will have to carry 15½ pounds additional. For electric cars the weight is considered without the electrolyte of the accumulators.

Louis E. Sicard, of Turners Falls, Mass., his wife, a motor cycle and a railroad train were the entries in a race from Millers Falls to Fitchburg, Mass., recently. Sicard rides a "Mile-a-Minute" Mitchell, and he made a wager with his wife that he could go by road on his motor cycle and get to Fitchburg as soon as she did, or ahead of her. The distance is 47 miles and the roads are hilly. Sicard arrived at Gardner, 31 miles from Millers Falls, 2 minutes ahead of the train, smiled and waved his hand at his wife as the train pulled in, and then was off to Fitchburg, where he arrived 8 minutes ahead of the train.

The value of the automobile as a pacing machine for race horses was demonstrated at Dayton, O., last Thursday when Cresceus, the famous pacer, made a mile in 2:08¾, breaking the record for a half-mile track. As was stated in the last issue of MOTOR AGE, George Ketchum, owner of Cresceus, purchased a White steam car and will utilize it in pacing his horse. Authorities on horse racing say that the automobile possesses undoubted advantages over the running horse as a pacing machine for trotters or pacers, while the flexibility of control and smooth running quality of the White renders it especially advantageous. The record of Thursday is said to be a remarkable one in view of the fact that the horse has been on a hard campaign and was in no condition for record-breaking. At Galesburg, Ill., next week Cresceus will go for the mile record on a mile track.

IN THE FIELD OF AUTOMOBILE DEVELOPMENT



MOTOR AGE

The Model Touring Car

PANHARD IMPROVEMENT

A decided novelty is shown on the new Panhard machines which Norris Mason, of the Societe Franco-Americaine, New York, received this week. Two of the spokes of the steering wheel control the spark and gas. The spokes are round with large milled rims and can be moved in any direction at the same time that the hands are moved in steering the machine, thus obviating the necessity of taking the hands from the steering wheel when desiring to change the speed of the car.

THE MODEL TOURING CAR

The Model Gas Engine Co., whose factory is at Auburn, Ind., where stationary engines have been manufactured for some time, made its first essay into automobile production with a runabout. This summer, however, a 1,600-pound touring car has been introduced. This car is a cross between a heavy car and the popular class of light tonneau machines. Moderate in weight, power and size, it is still strong and lightly built, and seats five grown persons comfortably. In general design the construction of heavier cars has been followed, the effort having been made at the same time to cut weight by a careful distribution of it. The illustrations present two views of the car and a sectional view of the carbureter, which is of the company's own design.

The running gear, upon which substantially all of the power plant and accessories are placed, comprises a stout steel frame 36 by 108 inches. This is carried by conventional semi-elliptical springs. The wheel base is 78 inches and the tread 56 inches. Artillery pattern wood wheels, either 30 or 40 inches in diameter, according to the desire of the purchaser, are used. Diamond double tube detachable tires are regularly supplied, although tires of any other standard make are optional.

The motor is of the double-cylinder, opposed, horizontal pattern, and is said to develop 16-horsepower at 900 revolutions per minute. The company has followed its stationary engine practice so far as the proportioning of the cylinders are concerned, for the stroke is extraordinarily long, being 7 inches for a bore of 4½ inches. The claim is made that this construction permits of great elasticity in

running, it being possible to reduce the speed successfully to as low as 150 revolutions. The crank case is of iron with aluminum cover. The ignition is of the usual jump spark system, whose current is supplied by either of two sets of large dry cell batteries, with a convenient switch. An extra or outside spark gap is mounted on the dash in conjunction with a Splitdorf coil.

The speed may be controlled through either the carbureter or the ignition apparatus. A pedal governs the former, the change of feed of which is regulated both relative to the quantity of fuel and the quantity of air or quality of the mixture. The carbureter control is recommended, as it is said the full possible range of motor speed may be obtained by it. The ignition lead is controlled by a small lever at the right side of the driver's seat. The lubrication of the motor is by the splash from the crank chamber. The direct feed of oil is through sight feed lubricators on the dash.

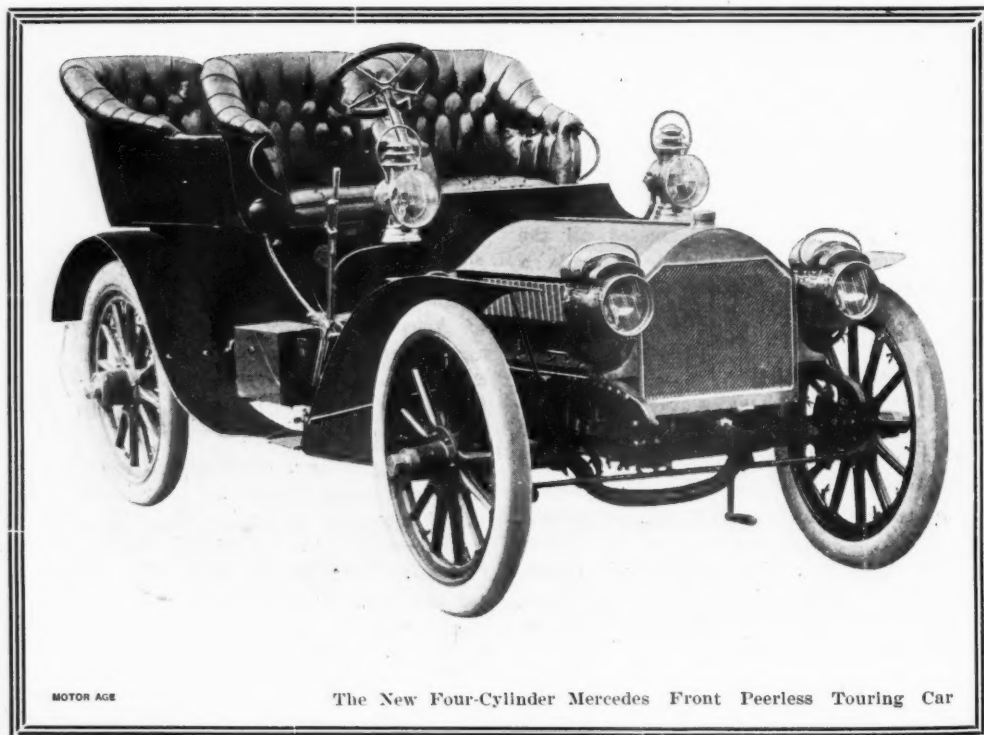
The motor is suspended practically in the middle of the car on an auxiliary frame, which also supports the entire transmission set. The transmission gear is of the type in which the drive is through spur gears always in mesh, and locked for respective engagements by a sliding key working within a hollow shaft. The gears are fully encased and run in a bath of oil. Those on one shaft are of steel, while those on the other are of bronze. The driving clutch is a modification of the Casner friction clutch, for whose construction patents were issued about a year ago.

With a regular gearing to provide a high speed of 30 miles an hour under normal conditions, the transmission ratios are three to one for the high, nine to one for the low speed, and six to one for the reverse drive. All of the speed changes, the clutch and the emergency brake are operated by a single side lever. The regular brake is actuated by a pedal. The differential on the live rear axle, which is driven by a single chain, is a Brown & Lipe spur gear.

The radiator in the water cooling system is one of the special features of the car. It presents 70 square feet of radiating surface, and by its peculiar construction the water space is at no place more than ¼ of an inch wide. The radiator is made of copper without a soldered joint on the inside. The circulation is by means of a Lobe pump driven directly from the end of the motor crank shaft.

The water tank holds 8 gallons, while the gasoline tank has a capacity of 12 gallons. These tanks, together with the batteries and the lubricating oil reservoir, are contained in the steel and brass bonnet on the front end of the frame, and are entirely exposed by the lifting of this hood. The muffler is of Auburn design and construction, comprising a series of dished disks or baffle plates. It is said to be effective and without noticeable back pressure. The steering gear comprises the well-known worm gear outfit with tilting hand wheel and ball connecting joints which are adjustable for wear.

While the car is not large, the body is roomy, and both the divided front and the tonneau



MOTOR AGE

The New Four-Cylinder Mercedes Front Peerless Touring Car

seats have high backs. The tonneau is long, measuring 48 inches inside at the bottom. There is a folding door seat in the tonneau. The body is finished in maroon, with black and brass trimmings. The leather upholstery is in dark maroon with brass molding. Substantially all of the working parts being attached to the running gear frame, the removal of the body is but the work of a few minutes. The car is equipped with two Dietz side lamps and one large front acetylene headlight, a large brass horn with flexible tube extending to hand wheel, two extra spark plugs and a full set of small tools.

SMALL SUNDRIES FOR MOTORISTS

Among the numerous small articles for automobilists' use which are sold by the A. L. Dyke Automobile Co., of St. Louis, Mo., are the hydrometer and oil cup filler shown in the accompanying illustration. The former comprises a tight, two-part case within which is carried a glass test tube that may be partially filled with the gasoline to be tested. The float

Dyke's Hydrometer and Oil Filler

taken to the Klosternenburg military depot or armory, where four regular army wagons or trucks were attached to one of the steamers. The tractor was loaded with 2,200 pounds of horseshoes; three of the trucks received each 6,600 pounds of the same load, while the fourth wagon was reserved for those following the test. The tractor was also given

2,200 pounds of coal and 4,400 pounds of water. Sixteen persons, together weighing about 2,640 pounds, were carried. Each of the four vehicles weighed about 1,650 pounds. The total weight pulled by the 50-horsepower steam tractor was 44,440 pounds. The length of the train was 57 feet.

After several demonstrations in the court of the armory the train started for a journey in the surrounding country, taking grades all the way from 8 to 16 per cent. At a certain point of the road the left wheels of the tractor stuck and it was necessary to use exterior means to release the car. This caused a

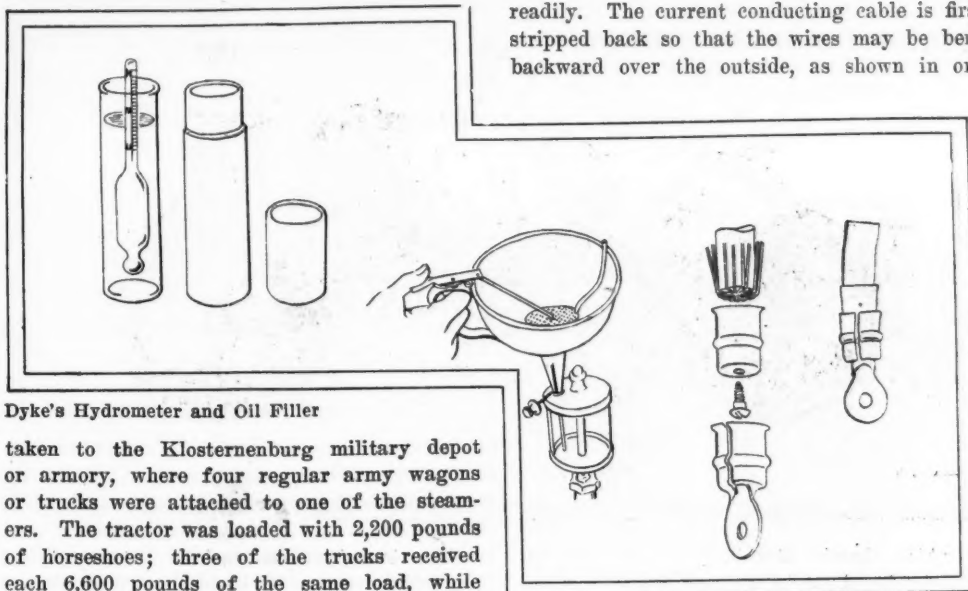
loss of 1 hour in running time.

A little further, on a 16-per cent grade, it was noticed that the wheels showed signs of weakness. The explanation of this was that the tractor was made for French roads, and not for the rough Austrian roads. To be able to continue the journey one of the four trucks had to be taken off and then attached to the 35-horsepower tractor which was following. M. Turgan, the French manufacturer of the cars, directed the operations. He had come to Vienna over the roads on the steamer, covering the distance of 930 miles between the two capitals in 14 days.

CONVENIENT CABLE END

Automobilists who have been bothered making secondary wire connection, who have burned their fingers on hot plugs trying to disconnect the wires, and who have had trouble with soldered connections, will appreciate the little device being introduced by Hertz & Co., 55 Grand street, New York. This is a snap cable connection which is, in the first place, easily attached to the cable, and which may be then separated or snapped together

readily. The current conducting cable is first stripped back so that the wires may be bent backward over the outside, as shown in one



MOTOR AGE

The Herz Cable End

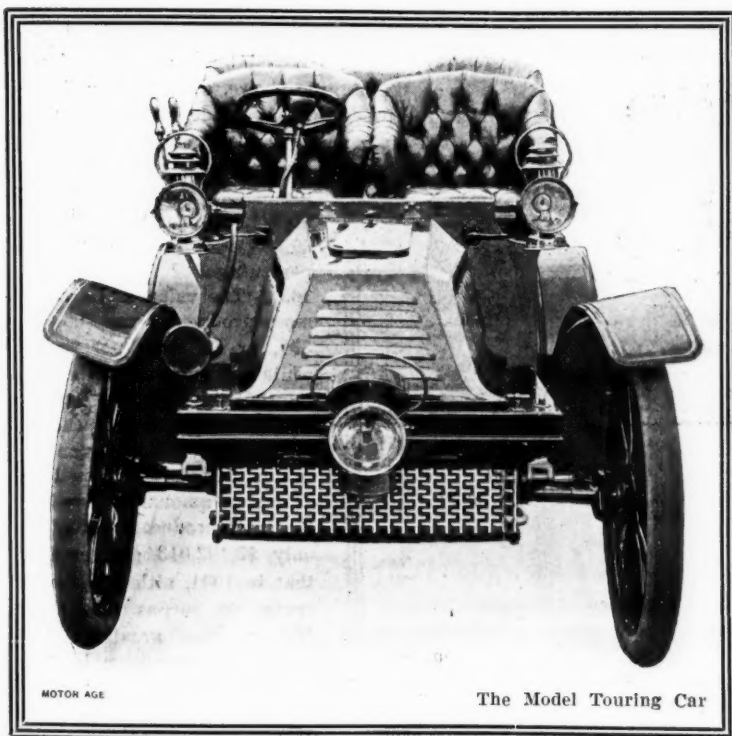
of the views of the accompanying illustration. The metal ferrule is then stripped over the end and fastened tightly in place by the small screw, which is screwed down into the end of the cable. The cable is then ready to be slipped or snapped into the end or connecting piece. It is obvious that the connection is always positive, and that it may be broken by simply pulling the cable section out of the end section. The connection sells at a low price.

NEARLY A MILLION INCREASE

Striking evidence of the fact that American automobile builders are developing a big foreign trade is afforded by the latest figures of the treasury bureau of statistics. During July the exports of automobiles and parts were valued at \$159,739, as against a value of \$133,073 for the same month last year. During the 7 months ending July the value of these exports was \$878,179, as compared with \$714,230 for the same period of 1902 and \$72,402 for the 7 months of 1901. A gain of \$805,777 in 3 years is a record the trade may well be proud of.

CONSTRUCTION OF PREMIER CAR

Some time ago MOTOR AGE illustrated and briefly outlined the construction of the Premier touring car made by the Premier Motor Mfg. Co., of Indianapolis, Ind. The accompanying three illustrations are views of the



MOTOR AGE

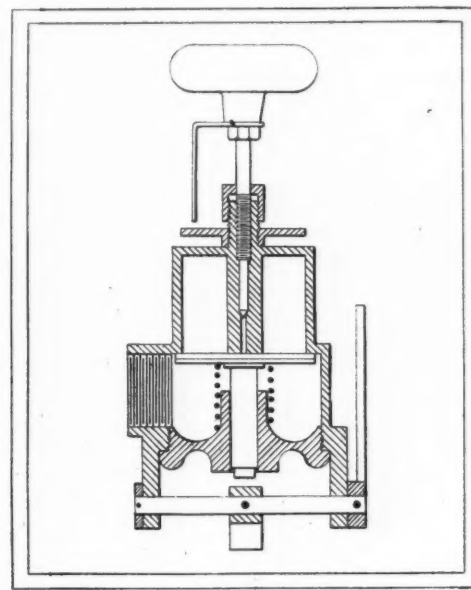
The Model Touring Car

containing the hydrometer is then placed in the gasoline and the reading taken. The specific gravity is shown by the level of the float. This should be from 68 to 72, covering the specific gravity range accepted as most suitable in fuel for automobile motors.

The oil cup filler is simply a strainer funnel, with a sort of release. It may be filled from the can or barrel supply, carried to the oil cup, and when the nozzle is in place, the flow is started by pressing on the feed release lever. Other novelties which the Dyke company is especially pushing are a small folding case for extra spark plugs, wrenches and battery connections, and a dash board lamp bracket which permits the light to be shifted in any horizontal direction. Another pattern of the bracket permits shifting the light vertically.

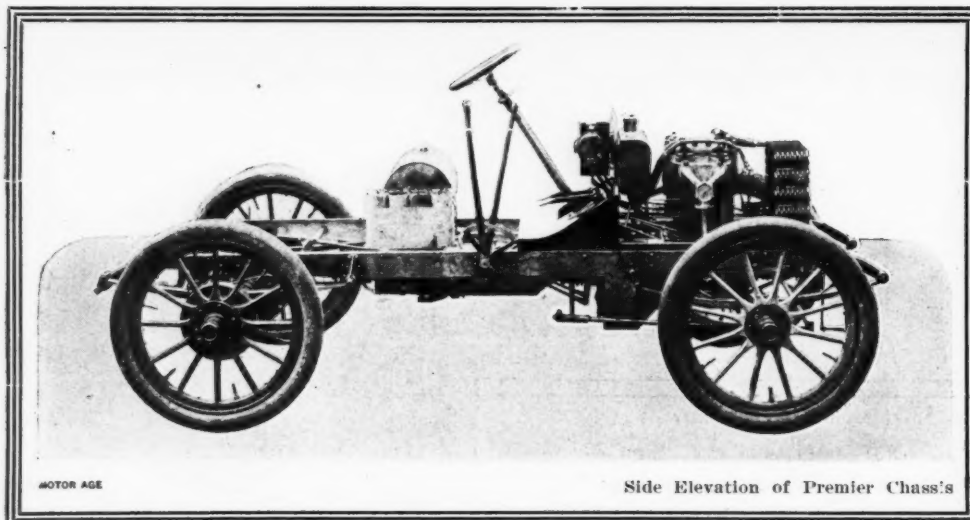
GERMAN MILITARY TESTS FRENCH CARS

Experiments were made recently in the neighborhood of Vienna, Austria, with two steam cars of the Turgan-Foy system. The cars were respectively of 35 and 50-horsepower and had been placed at the disposition of the Austrian war minister. The cars were



MOTOR AGE

Carburetor of the Model



Side Elevation of Premier Chassis

assembled chassis of this car. The Premier company has been in no rush to get the car onto the market in large numbers, and has, in fact, been so thorough in its work of experiment and development that it feels well satisfied that the car is now in excellent shape for a broader introduction.

The running gear frame is of the pressed steel pattern, practically new to this country, and bound to become popular sooner or later both because of its combination of light weight and strength, and on account of its general dressiness and adaptability in the attachment of the power plant elements. The frame is supported by 40-inch, semi-elliptical springs. The wheels are 34 inches in diameter, of the artillery pattern, and equipped with 3½-inch clincher tires.

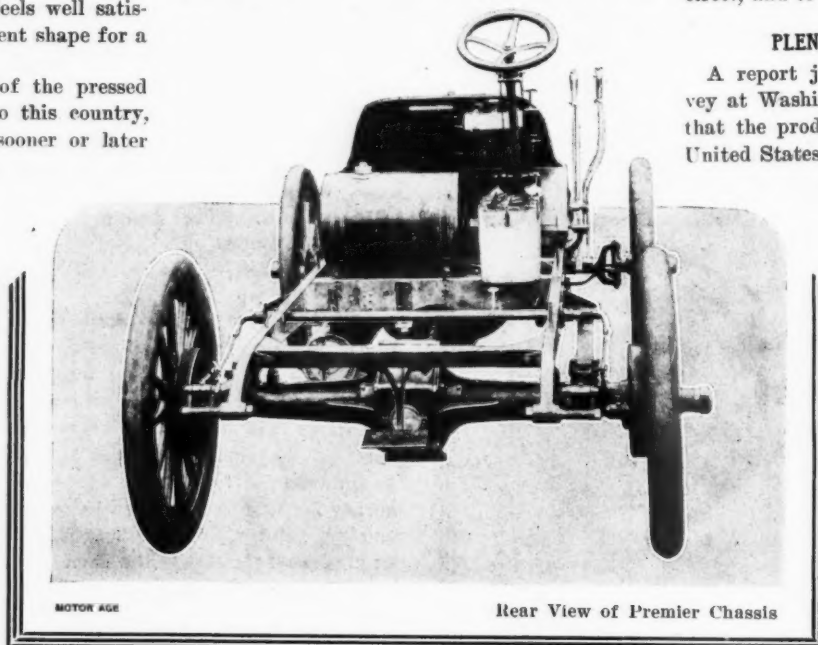
The motor and transmission gear case are placed on a unit sub-frame, the disposition being such that the main driving shaft is in line with the motor crank shaft. It is said that the arrangement of these parts tends to prevent twisting or contortion of the frame from affecting the alignment of the driving members. The rear axle is made of two large, heavy ribbed steel castings, which are interchangeable. The usual truss rods are obviated by this construction.

The motor is of the double-cylinder, vertical pattern placed in front under a modern bonnet. The bore and stroke are 5 and 6 inches respectively. The engine, while set low on the frame to lower the center of gravity of the car, does not cause a sacrifice of road clearance, an item of importance in a car to be run on typical American roads. The crank case, aluminum, is fitted with phosphor bronze shaft bearings of large diameter. The inlet and exhaust valves are located on opposite sides of the cylinder, and are both mechanically operated and interchangeable. The jump spark ignition is used. The speed of the motor is controlled by a throttle governor, which limits the speed to any predetermined point.

The driving clutch is of the usual leather faced, cone pattern, and is of large diameter and with a broad face, the intention being to reduce wear by the provision of ample driving surface. The driving member is self-contained, tending to eliminate the troublesome end thrust sometimes evident in clutches when the

vehicle is being run under a heavy load.

A sliding gear transmission set, in an aluminum casing, furnishes three speeds forward and a reverse drive, transmitting direct on the



Rear View of Premier Chassis

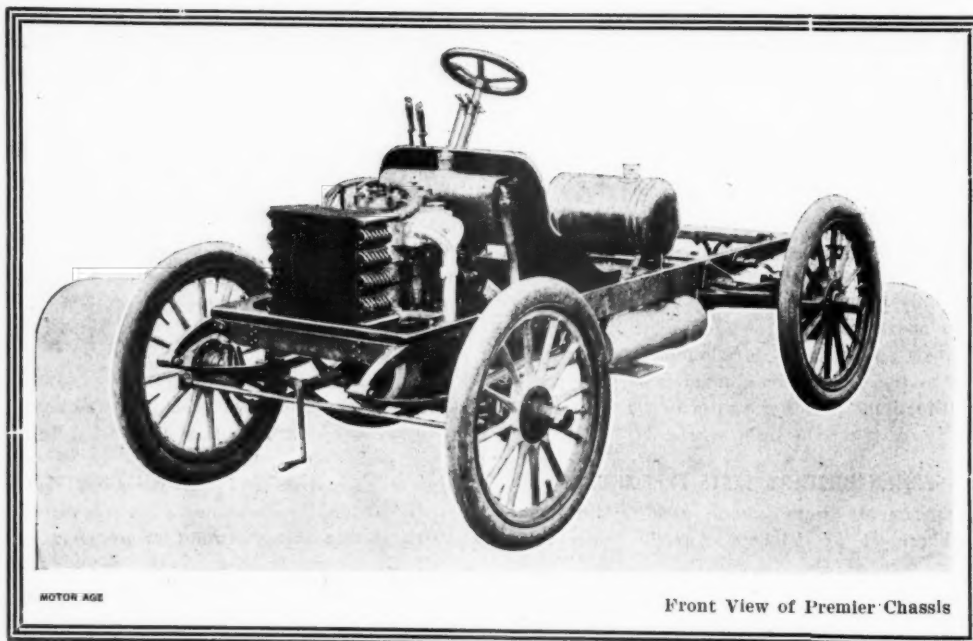
highest speed. All three forward speeds and the reverse are controlled by a single side lever which is automatically interlocking in its operation, rendering it impossible to change

speed without first disengaging the clutch. The gears are of coarse pitch and wide face, able to meet all reasonable requirements in the way of strength, while the bearings are large and bronzed bushed. The final drive is direct through a propeller shaft with cardan joints, and through bevel gears to the differential gear on the live rear axle. The secondary shaft of the transmission gear set is the same horizontal plane as the main driving shaft. The regular foot-operated brake is on the rear end of the transmission gear case.

The body of the Premier is in keeping with the character of the chassis. The tonneau is especially roomy, and all of the seats have the comfortable high backs that are coming to be demanded in a thoroughly high-grade car. The tonneau carries three people, there being a folding seat on the inner face of the door. The rear extremity of the tonneau is well within the rearmost point on the periphery of the wheels. This forward position of the tonneau is given it with a view to avoiding the somewhat common, so-called "teeter-board" effect, and to lessen the strain on the rear tires.

PLENTY OF GASOLINE IN SIGHT

A report just issued by the geological survey at Washington shows, among other things, that the production of crude petroleum in the United States in 1902 was greater than that of any previous year, the total production for the year being 80,894,590 barrels, as against 69,389,194 barrels in 1901, the percentage of increase being 16.5. The value of this enormous production was \$69,610,384, or 86 cents per barrel, while the value of the product in 1901 was \$66,417,335, or 95.7 cents per barrel, the decrease being 9.7 cents per barrel, or 10 per cent, in 1902. The gross amount received for the total product in 1902 was only \$3,193,013 greater than that in 1901, although the increase in output was about 16.5 per cent greater. The exports of petroleum in 1902 amounted to 1,064,233,601 gallons, being about 15,000,000 gallons less than that exported in 1901. Pessimists who are afraid automobiles will use up all the gasoline may take hope.



Front View of Premier Chassis

AMERICAN MOTOR LEAGUE OFFICIAL BULLETIN

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ROBERT L. STILLSON, Sec'y, 150 Nassau St., New York.
FREDERICK B. HILL, Treas., 32 Binford St., Boston.

NATIONAL HEADQUARTERS, 150 NASSAU STREET, NEW YORK

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FROM NEW MEMBERS

Below are a few letters received from members who have recently joined the league. They are taken at random from a very substantial number of the same sort and are presented so that every reader may see that the work is taking hold and that the A. M. L. is making friends in all directions. All membership tickets now issued are in the "pioneer class," and when the limit is reached applicants will no longer be given that distinction. Meanwhile the league will be glad to receive letters from its members, old and new, and to feel that they are willing to do a small part in building up the organization.

The letters follow:

Coplay, Pa.—It gives me great pleasure to join the A. M. L., whose work, I think, is a long stride in the right direction and certainly should receive the fullest possible support from all motorists. Kindly forward any printed matter which may be useful in enrolling new members. We have in this locality some fifty or sixty motor vehicles and if you can give me proper support I will try to make them all members of the American Motor League. If you have no consul in this locality I should be pleased to act in that capacity. I wish the A. M. L. all kinds of success.—B. C. WILSON.

Cincinnati, O.—I contemplate joining the league in the near future and if in the meantime I can be of any assistance to you in Cincinnati you may feel free to call on me.—L. S. COLTER, Secretary Automobile Club of Cincinnati.

Watervliet, N. Y.—I have read your constitution and by-laws from beginning to end. The plan of organization is an admirable one and I predict for the league a great future. I send you three applications for membership besides my own and will report further within a few days.—S. H. MENEELY.

Boston, Mass.—I thank you for your esteemed invitation of the twenty-fourth. It gives me pleasure to enclose my application for membership, together with check covering the same. I am already a subscriber to MOTOR AGE. Thoroughly in sympathy with your splendid aims, with confidence that you will achieve eminent success, I can wish nothing less than that through the efforts of the American Motor League, a national highway from the Atlantic to the Pacific will be constructed; roads everywhere greatly improved and that liberal legislation, identical in the several states, will encourage the automobile, the most important new industry of our time.—W. P. KIDDER.

Hazleton, Pa.—I have your letter of the twenty-seventh notifying me of the appointment on the sign board committee. I am pleased to accept the same and trust I can be of some assistance to you

THE AMERICAN MOTOR LEAGUE

is an organization to promote the interests of all users of motor vehicles; to ascertain, protect and defend their rights; to oppose and prevent the enactment of unreasonable and oppressive laws; to encourage the use of motor vehicles by agitation and instruction; to provide its members with printed routes, maps and guide books by which touring may be facilitated and encouraged; to promote the work of improving the public roads and the erection of proper guide boards, and other signs, necessary to guide and warn the users of motor vehicles; to select and appoint official hotels, repair shops and supply stations where its members may obtain reliable service at reasonable rates.

WHO MAY BECOME A MEMBER

"Any man or woman, 18 years of age or over, of good moral character and respectable standing, friendly to the motor vehicle and its interests, shall be eligible to membership."

(Constitution, Article 2, Section 1.)

The League is extending its membership in all parts of the country. We invite all friends of the movement to join and aid in building up a powerful organization.

NO INITIATION FEE. ANNUAL DUES \$2 IN ADVANCE, OR \$3, INCLUDING 1 YEAR'S SUBSCRIPTION TO MOTOR AGE.

in the work. My touring around on a bicycle when I was younger, and during the last 3 years with an automobile, though more limited, has been very annoying on account of the inevitable absence of the road side sign post, which is never to be found when most desired. Though we can probably do much, legislation should supply the deficiency. During the latter part of July, the great lack of such sign boards caused myself and party much delay while running a new Haynes-Apperson touring car from Kokomo to Hazleton. The boards were few and far between, and rarely in sight when most wanted. I was accompanied by my wife and niece, and Mr. Nutt from the factory, not caring to run a new car such a long distance—over 850 miles. We came through with only one puncture and a broken brake rod support, which I consider almost a perfect record. We were 8 days on the road, losing one and a half on account of weather. After running to Cleveland, our route followed the proposed course of this fall's endurance trial to Binghamton, after which we crossed the mountains to Scranton. The route will be an ideal one for an endurance test, but a good many will fall by the wayside. It is too bad they will not go via Scranton, as some of the "park riders" would have their eyes opened, and it would be a most excellent experience for the manufacturers who do not give the people in

the mountains the proper consideration. I frequently discuss grades with city agents and find them woefully ignorant.—JOHN B. PRICE.

Herkimer, N. Y.—My time is very much taken up but I will assist in every way possible in forming a board of consuls in our town.—J. V. HEMSTREET.

Kahn Spuyten Duyvil, N. Y.—I offer my services gladly and will be obliged if you will let me know what I can do to aid the good work.—DR. ROBERT JOHNSTONE.

Chicago—I am pleased to note that the league is growing, and will do what I can to help it along.—EDWIN F. BROWN.

Youngstown, O.—I have had several different makes of automobiles and a motor cycle in the last 2 years and as there is no prospect of local club benefits I am only too glad of the opportunity to send you my membership fee, for I know if we all push together and in the same direction it cannot fail to do a large amount of good. Our Ohio laws at the present time are not as bad regarding the use of automobiles as are the roads over which we drive them. The laws relating to the making of roads cannot be changed too soon. By the discontinuance of the rural free mail delivery the mossbacks who thought the roads were good enough are beginning to see the value of better roads and their necessity to our state. In several counties this discontinuance of free mail delivery has awakened them to the fact that by a little energy in the way of road improvement they may have the advantage of daily mail delivery again extended into rural districts. It is now the business of the American Motor League to push along in the same direction and make the most of every chance to bring about road improvement.—C. E. BOWN.

Norwich, N. Y.—I enclose a list of persons who own automobiles in this town and suggest that you send them your printed circulars with membership blanks. I will then call personally on each and urge him to join our league. We can get more members in this way than in any other and if the plan succeeds I will send other names from other towns in Chenango county. Do not hesitate to write me if I can be of any assistance in furthering the interests of the league.—C. W. LANPHER.

Rochester, N. Y.—I am a hearty believer in the work of the league and am willing to help in every way possible by co-operating with the local board and looking after the affairs of the organization.—JOSEPH J. MANDERY.

Granville, N. Y.—Yours received and we enclose \$3 as per card, and feel willing to co-operate with you in anything we can do in this place. We are selling some cars here and will place a good many by another spring. Our village has 4,000 people, with 10,000 close by. A number of automobiles are in use, with interest in them growing and a great many wanting them. Kindly send any memoranda you may have for guidance and information as suggested.—THE METTOWEE VALLEY AUTOMOBILE AGENCY.

If you are not a member of the American Motor League, send your name and address to R. L. Stillson, Secretary, 150 Nassau street, New York, and obtain printed information.

THE PACKARD TRANS

THE PACKARD Overland Trip was deliberately planned and as deliberately carried out. There was nothing haphazard or random about it, but a definite object always in view.

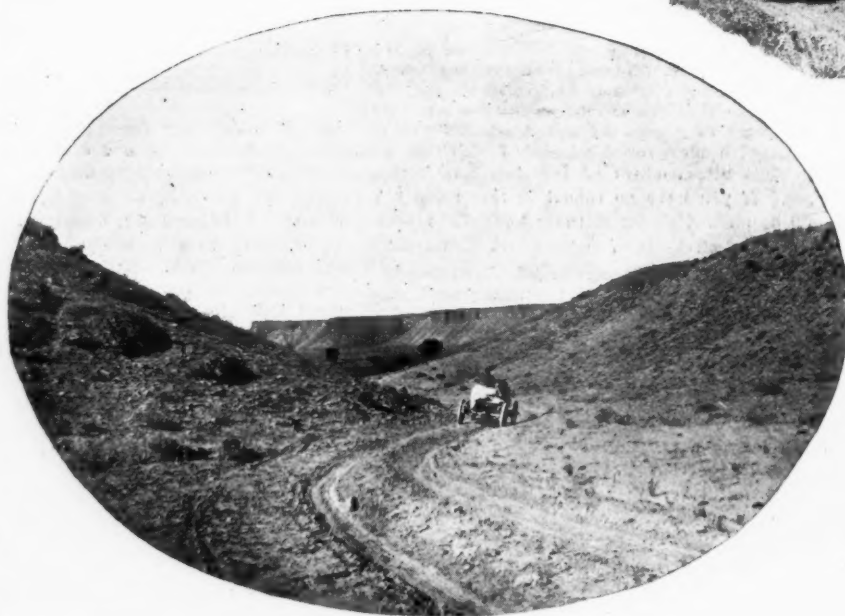
We wanted to show most convincingly that the combination of sand, rock, mountain grade and mud did not exist which the single cylinder motor and flexible running gear of our Standard Model F touring car was not abundantly able to overcome.

We wanted to demonstrate its unfailing reliability under the most severe test that could possibly be conceived of, and to keep a complete record of every repair made on this fearful undertaking, that not only might a better appreciation be obtained of the superior qualities of the Packard Motor Car for endurance and dependable operation but that we might add our mite to the ever increasing volume of evidence of the complete practicability of the motor car and in that way help in the removal of the last traces of prejudice against it as an experiment.

The records of this trip were kept by Marius C. Krarup, an engineer and writer of considerable note, but whose principal recommendation lay in the fact that he stood for truth—that his report would really need no proof, being proof itself. With this as a base, and the affidavits of two men to back it, we believe the statements which will follow are entitled to more than ordinary consideration.

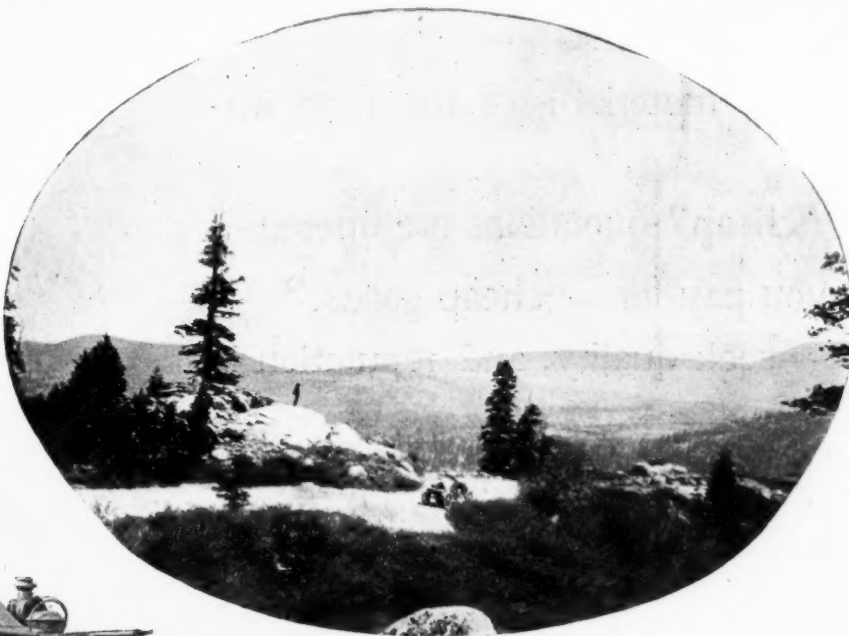


TOM FET
DRIVING "OLD I



"ASK THE MAN W

S-CONTINENTAL TRIP



FETCH.
OLD PACIFIC"



CARBURETER.—With the exception of a different position of the air valve for high altitudes, absolutely no adjustment was made upon the carbureter in the whole 4,068 miles. It was never taken apart until near Clark, Neb., (2,300 miles from the start) when it was drowned in a buffalo wallow and had to be cleaned of mud and water. Erie, Pa., (about 3,500 miles) saw the only replacement made on the entire trip. A new lifting nozzle was substituted for the worn one. At any elevation or temperature, angle of operation or motor speed, the result was always the same—a perfect mixture.

ELECTRICAL APPARATUS.—The original eight dry cell batteries with which the car was started carried it to Omaha, about 2,500 miles. Here eight supposedly new cells were purchased, but four were down and out in fifty miles and had to be replaced at Des Moines. The new set of four and those remaining from Omaha took the car about 1,000 miles to Jefferson, Ohio, where it was thought advisable to change again for the remainder of the trip. The last set were doing splendid work at the completion of the journey in New York. In all, twenty Columbia Dry Cells were used in addition to the original eight.

The spark coil (Packard) required a pair of new platinum points at Omaha. It made the entire journey without the slightest trouble of any kind.

The spark plug with which the motor was originally equipped took it to Nebraska, but the mud-hole which drowned the engine cracked the porcelain and necessitated a replacement. The new plug acted indifferently and was changed after fifty miles. The last one gave perfect results during the remainder of the journey.

Considering the severity of the trip, the above may seem like an exceptional record. Investigation will show you that it is excelled many times over in everyday usage by hundreds of Packard cars all over the country.

PACKARD MOTOR CAR CO.,

Warren, Ohio.

WHO OWNS ONE"

A GOOD "REP."

A good reputation is like added capital.

To gain a good reputation the manufacturer must make good goods.

To make good goods—good material is of the most importance.

Don't buy just because "cheap" quotations are offered—usually you get just what you pay for—"cheap goods."

Look beyond mere price—seek quality, and reputation is bound to follow.

Our reputation for making good goods, at honest prices, is known to users of Standard Rims and Standard Seamless Tubing—and as this tubing is so good, we make Front and Rear Forks, Stays, Fork Stems and Seat Posts better than if made out of ordinary tubing.

You're no doubt anxious to improve your product wherever you can—anxious to gain a better reputation—then recollect! you must consider goodness of more importance than price.

Write us—we'll prove to you that we make good goods by sending you samples for your inspection—yet in price you'll pay no more than you would for goods that are not backed by the reputation we enjoy

MAKE US PROVE THIS



SATURDAY, SEPT. 12

RACE MEETING

OF THE

New York State Fair Association

AND

The Automobile Club of Syracuse Syracuse, N. Y.

Events Include Contests for Motor Bicycles and all Motor Cars

SPECIAL MATCH RACES

Including a Three-Cornered Contest Between

F. A. LA ROCHE

40 HP.

Darracq

JULES SINCHOLLE

40 HP.

Darracq

HENRI PAGE

40 HP.

Decauville

These three cars were made for and driven in the recent PARIS-MADRID RACE

This is the Race Meet You want to Attend

Special Club Runs are Being Arranged to Arrive in Syracuse for these Races.

REDUCED RATES ON ALL RAILROADS IN NEW YORK STATE

ENTRY BLANKS ON APPLICATION

ENTRIES CLOSE
SEPT. 9, 1903

C. A. Benjamin, Automobile Club of Syracuse,

SYRACUSE,
N. Y.

Ready for Business

Several weeks ago we announced
the winning of the

GORDON BENNETT CUP

ON

CONTINENTAL TIRES



we followed it up with the

VICTORIES AT YONKERS

the most important events in America.

We are now pleased to announce that a complete stock of tires in every size has arrived from Germany, and we are ready to fill any orders, for any quantity, the same day when received.

SEND FOR PRICE LIST.

THE CONTINENTAL CAOUTCHOUC COMPANY

EMIL GROSSMAN, Manager

298 BROADWAY, NEW YORK.

All Roads Alike to The Oldsmobile



**ACROSS
THE CONTINENT IN AN
OLDSMOBILE**
THE FIRST AND ONLY RUNABOUT
TO SUCCESSFULLY COMPLETE
THE TRIP.

The Oldsmobile trans-continental trip is the most wonderful automobile journey ever made. From San Francisco to New York, over mountains, across deserts, through sand and mud, the Oldsmobile won its way, surmounting every difficulty and proving to the world it is "built to run and does it."

By this remarkable trip, the Oldsmobile demonstrates its equality with the high priced touring car. Twenty-three years' experience in the manufacture of gasoline engines enables us to make a perfect motor. Simplicity is the key-note of the entire mechanism, and it is this perfect mechanical construction which leaves "Nothing to Watch but the Road" and which made possible this runabout's wonderful trip from the Atlantic to the Pacific.

PRICE, \$650.00

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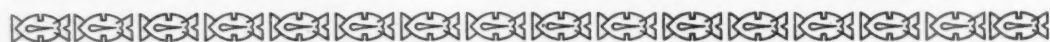
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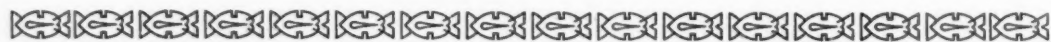


United States Letters Patent No. **549,160**, granted to George B. Selden, November 5, 1895, controls broadly all gasoline automobiles which are accepted as commercially practical. Licenses under this patent have been secured from the owners by the following named manufacturers and importers:

Electric Vehicle Co.	Pope Motor Car Co.
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These manufacturers are pioneers in this industry and have commercialized the gasoline vehicle by many years of development and at great cost. They are the owners of upwards of four hundred United States Patents, covering many of the most important improvements and details of manufacture. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasoline automobiles, and any person making, selling or using such machines made or sold by any unlicensed manufacturers or importers will be liable to prosecution for infringement.



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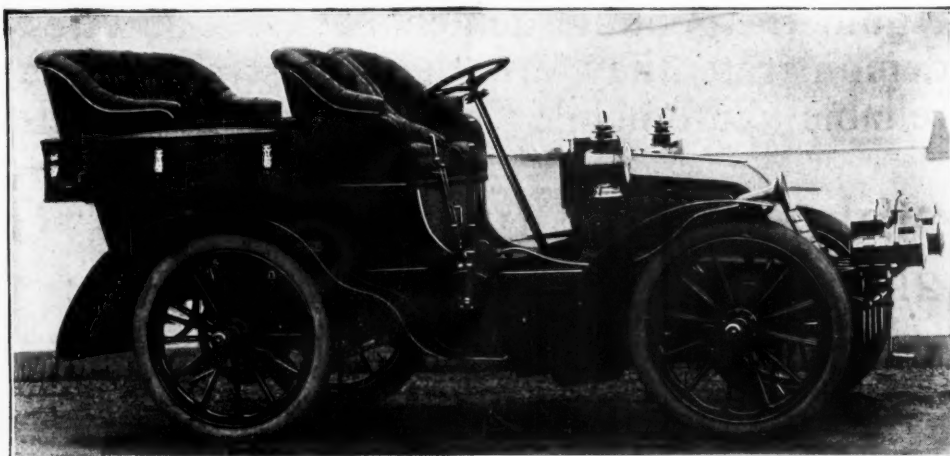
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2nd " . . .	59	Two Miles . . .	1:55 2-5
3rd " . . .	59 3-5	Three Miles . . .	2:55
4th " . . .	1:00	Four Miles . . .	3:55
5th " . . .	59 3-5	Five Miles . . .	4:54 3-5
6th " . . .	59 3-5	Six Miles . . .	5:54 1-5
7th " . . .	1:01	Seven Miles . . .	6:55 1-5
8th " . . .	1:00	Eight Miles . . .	7:55 1-5
9th " . . .	59 3-5	Nine Miles . . .	8:54 4-5
10th " . . .	1:00	Ten Miles . . .	9:54 4-5
TOTAL . . .	9:54 4-5	Mile Average . . .	:59 4-5

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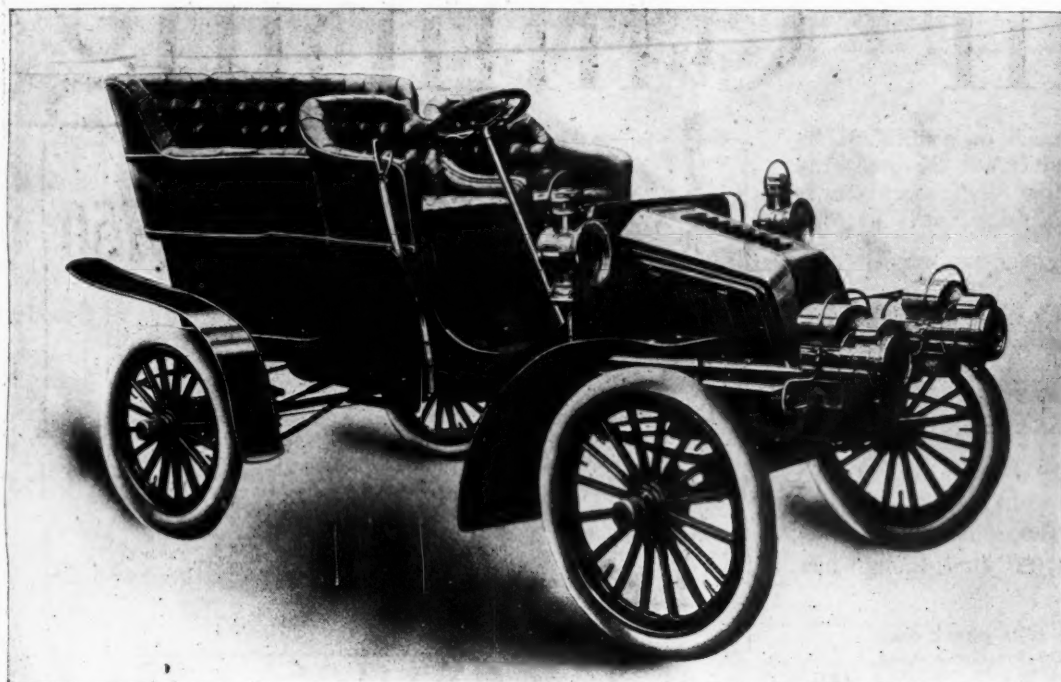
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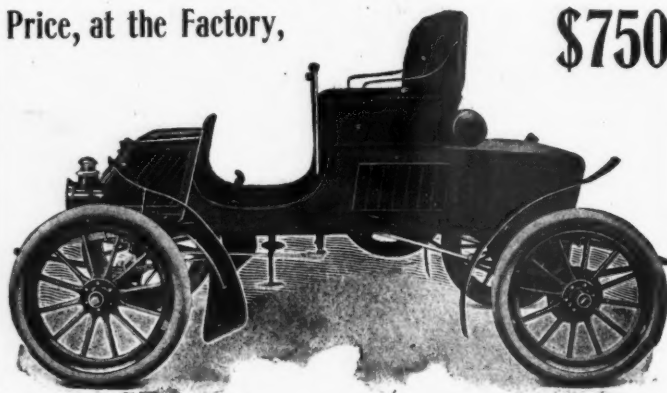
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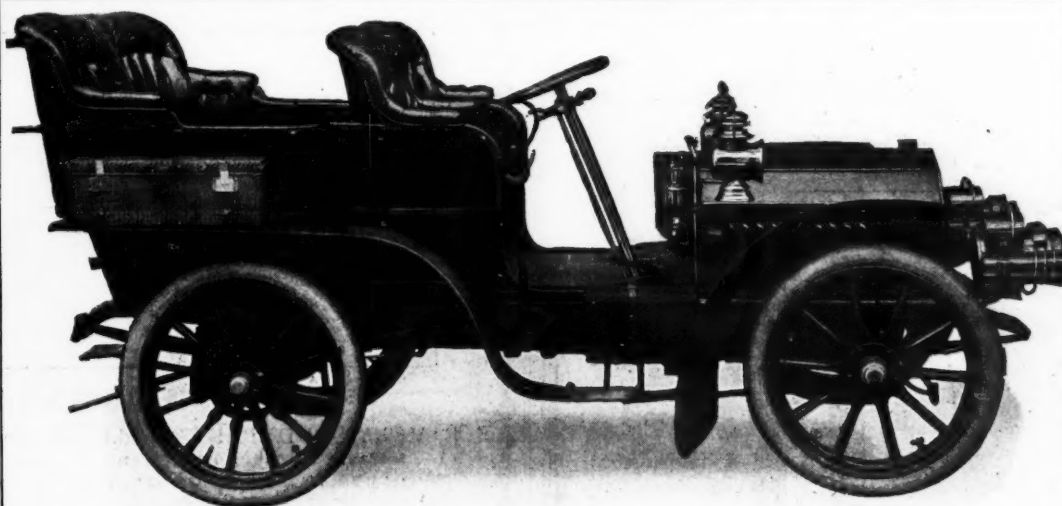
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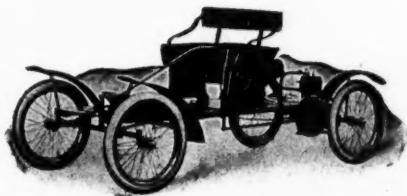
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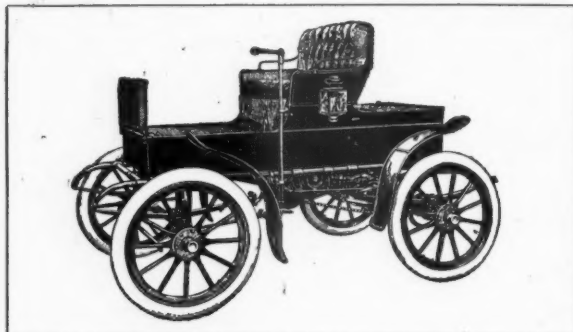
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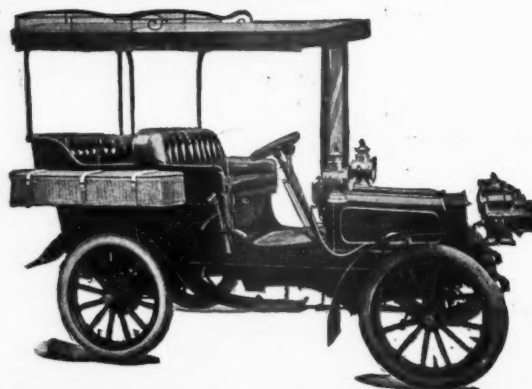
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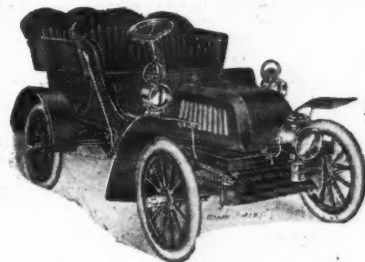
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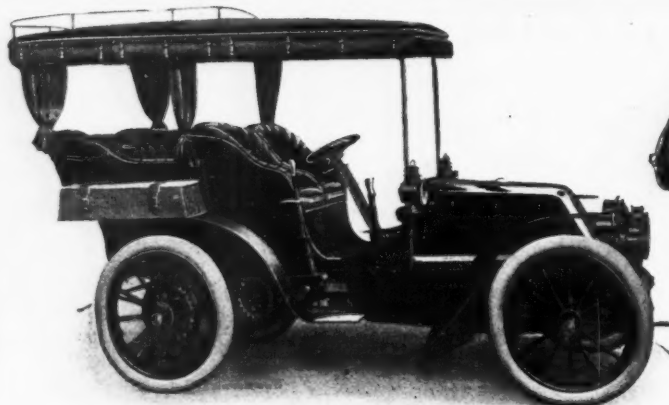
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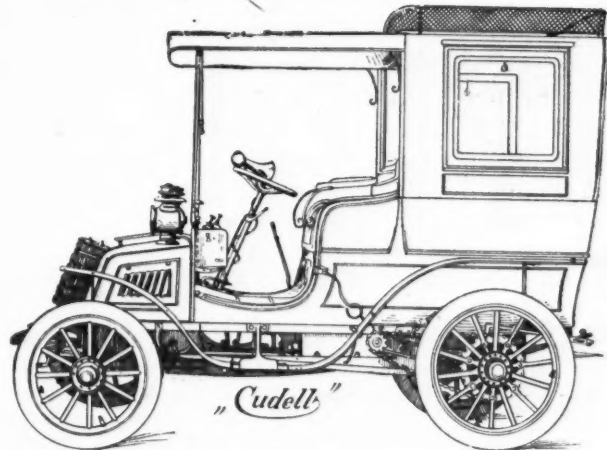
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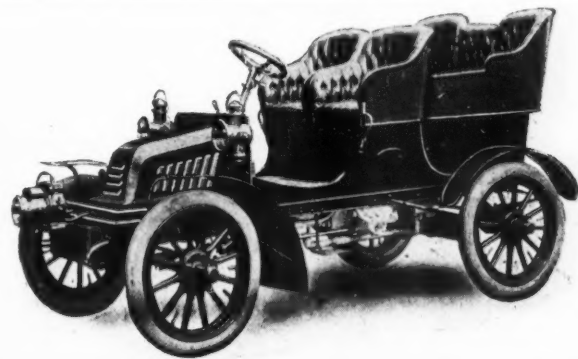
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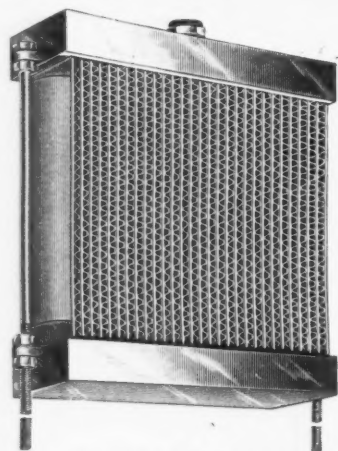


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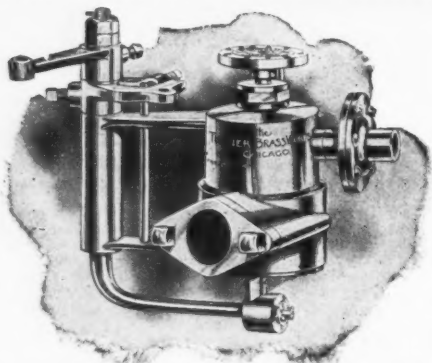
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WHY? Because both makers and users of lamps saw that we had the only practical way of making **GOOD OIL LAMPS**. You will be sure of satisfaction if you insist on

Genuine Dietz Lamps.
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Renewals at Attractive Prices.
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DURING OCTOBER—
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TONNEAU FOR THE OLDS



Can be attached in a few seconds without alterations to car. Convenient, comfortable and roomy. Well built, strong and well finished. Complete.

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For other cars.

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Patent Pending.

The cut represents our latest improved Cellular Cooler. It is the most efficient and up-to-date radiator made, and is less expensive than anything of similar construction. We also make Disc Radiators and we aim to make them the best on the market.

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Made in Two Sizes, 6 and 12 H. P.

Double Cylinder. Directly Opposed.

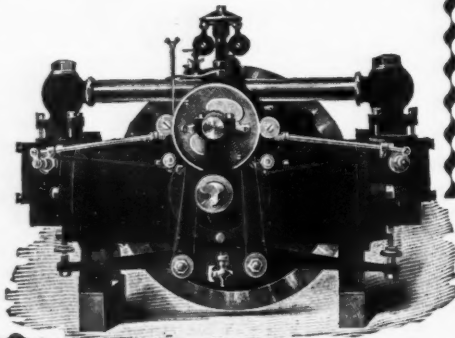
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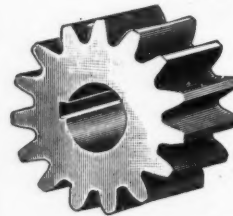
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Spur Gears, Bevel Gears, Spiral Gears, Worms and
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Internal Gears require only 3-16
Inch space between Gear
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If you want perfect Gears send them to
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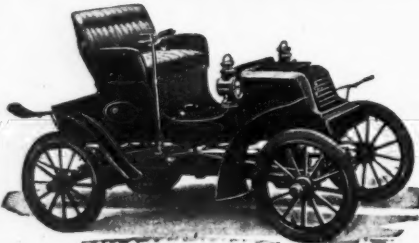
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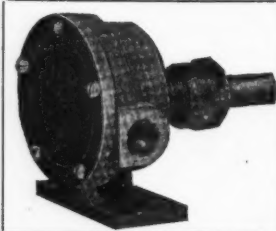
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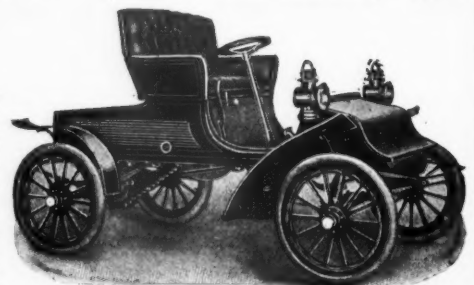
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"The Touring Car for Two."

Absolutely Immediate Delivery.

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A Quick Start,

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The most serviceable autos for everyday use. Extremely simple in construction and operation. Powerful batteries. Ready to go at any time without tinkering. Any member of the family can handle a National.

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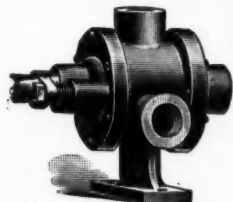
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LOBEE PUMP

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Face in leather effects with fine wool linings

The only robes that harmonize with the Automobile and its trappings, and the only ones in keeping with

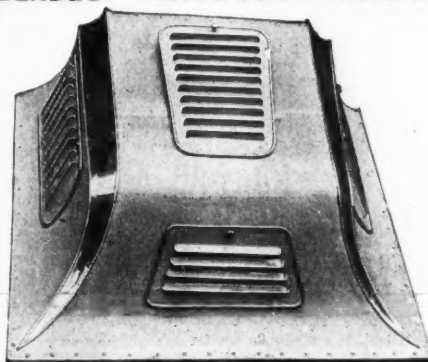
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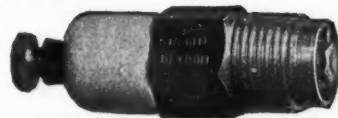
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OUR HOT BOX IN REALITY THE HOTTEST SPARK PRODUCER MADE.....

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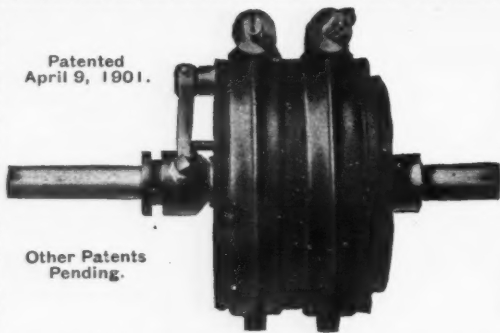
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Parties who patronize those columns once invariably come again. Results is what they want. A better sales medium cannot be found than a carefully worded classified ad. in

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The expense is nominal. 3 cents per word for first insertion and 2 cents for each subsequent insertion.

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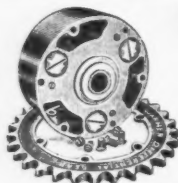
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Two Forward Speeds and a Reverse.
Made entirely of Spur Gears cut
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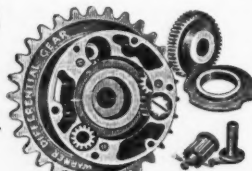
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WHILE the showing of the American automobiles in the Gordon Bennett Cup Race was somewhat disappointing, I have faith in the ultimate success of the home product. However, I still advise the purchase of the imported car for this year. I have a

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the finest touring car built, for **quick delivery.**

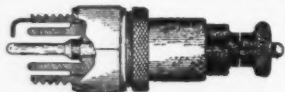
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You would not be without it

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8 H. P., 2 Cyl.
ALUMINUM CASE
GOVERNOR.

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Lists on Application.

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The Most Popular Coil on the Market.

The name

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Speaks for itself. (Short, but oh my!)



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...USE A...

Schug Spark Coil

IF YOU WANT
TO USE

THE BEST

SCHUG ELECTRIC MFG. CO.

DETROIT, MICH.



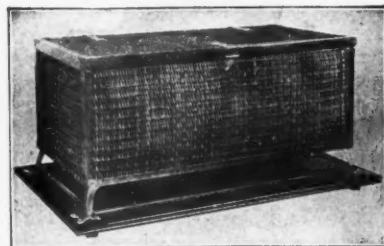
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Reasons why you should have one:

1. It prevents deposit of oil in Spark Plug.
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It is adapted for use on all gasoline engines using the Spark Plug system of ignition. Made in standard sizes. Sent on receipt of price, \$2.25, prepaid to any address
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Just the thing for Olds and other Runabouts. Covered with reed; waterproof, dust proof. Brass bound with brass hamp and hinges. Mounted on brass feet on a deck to take place of the auto deck. Air space between hamper and deck.

Price \$15.00

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Very best of references.

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We make over
Twenty Types of Cars

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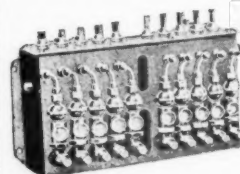
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The Quietest Touring Car Built
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THE FINEST THAT
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Parts a Specialty

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KINGSTON CARBURETER

Patented May 12, 1903.
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Gives perfect control over motor and furnishes perfect uniform mixture at all speeds. Throttle consists of fuel needle point valve and air regulating valve, both acting together by one lever.

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THE... AMERICAN Little Wonder Dynamo

has system of storage in the base; requires no other batteries for starting. If you desire a FIRST CLASS machine at a low price be sure and get the
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Tubular Water
Coolers a SpecialtyHOODS, FENDERS, RADIATORS,
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AN AUTOMATIC LATE SPARK
FIXTURE FOR OLDSMOBILES.

Attached by any one in thirty minutes. Simple, interferes in no way with spark lever, and makes back kick impossible when starting.

Sent, Prepaid, \$2.00

Money refunded if not satisfactory.
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Slightly used, perfect condition, 1903 model 20-horse power. Aluminum body. A Great Bargain.

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Protected porcelain.

Wonderful Results.
A trial is conclusive.
Reversible insulation.
Double life. Any length
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Applicable to Any Motor Bicycle

THE A. CLEMENT CYCLE MOTOR
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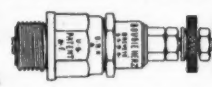
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THE BEST SPARK PLUG EVER MADE.

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Sparks as
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gives as powerful a light as any
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E. J. SPARK GAP 50c.

Points enclosed in glass tube.

E. J. WILLIS, 8 Park Place, NEW YORK.

Herz Oscillum

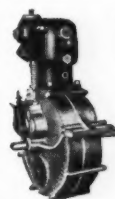
Will make any spark plug
spark. Money refunded
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Send 50 cents for one today

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Evinrude Motors

with 3 speeds and reverse, new type
planetary gear. 7 H. P. single, 14
H. P. double cylinder. Finest work-
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Prompt Deliveries, Prices Right.

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Ideal Gasoline Car for City and Country Use. Write for 1903 Catalog and Prices.

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For Automobiles.

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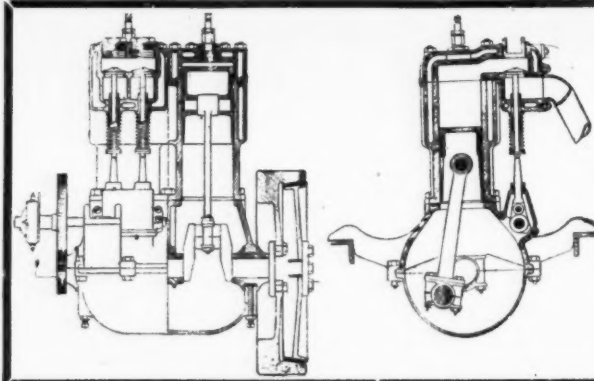
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12 H. P. Double Cylinder Gasoline Engines

Mechanically operated inlet valves, complete with carburetor, plugs, coil, battery and **clutch** in the fly wheel as per illustration. Price, **\$195.00. Guaranteed.** Only a few at this price. Order quick. **3 Speed Sliding Gear Transmissions, \$150.**

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Send 10c for the largest auto supply catalogue in the world.

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'02 Olds, no top, gas lamps; in good shape; '03 carburetor; trussed axles. \$325.00
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One Thomas, model 17, brand new from factory. 1,000 00
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And a number of other models. Address Cadillac Company of Indiana, Indianapolis, Ind.

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FOR SALE—One automobile running gear, complete with Goddard leather top and Hartford tires; artillery wheels, 36x4 and 32x3. One double cylinder gasoline engine, 4x6 in., with carburetor. One electro plating and polishing outfit. Will sell all or any part. Spencer Bros., Monongahela, Pa.

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Knox Delivery Car wins first award in New York Commercial Contest May 20 and 21, with "Dunlops." (Weight of vehicle, 3,800 pounds.)

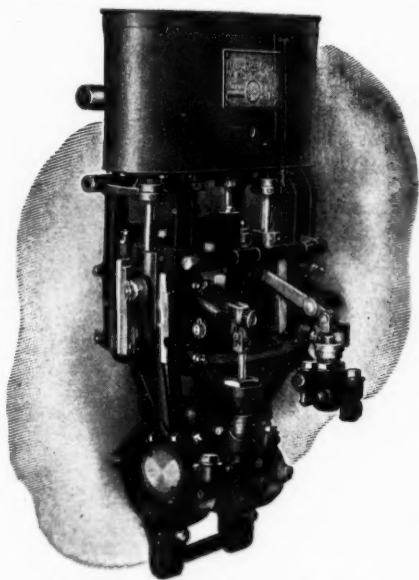
Stanley Steam Car wins world's mile record at Readville, Mass. May 30, with "Dunlops."

C. H. Curtis Motor Cycle wins first award in New York Motor Cycle Club's Hill Climbing Contest, May 30, with "Dunlops."

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